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Cultural Variations in Relationship Provisions: A Five-Culture study of Children's Perceptions of Support from Parents and Best Friends

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Cultural Variations in Relationship Provisions : A Five-Culture study of Children's Perceptions of Support from Parents and Best Friends

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Abstract

Much of the literature on the support provisions of children's relationships has been based on North American sampling. Cultural context has largely been overlooked and may be important in shaping the development of specific support provisions. The present study is a cross-cultural investigation of children's perceptions of the types of support they receive from their mothers, fathers, and best friends. A total of 1101 children in grade 6 from the Southern region of Brazil, Canada, the People's Republic of China, Cuba, and Southern Italy completed the *Children's Social Networks Scale.* Children were asked to select among lists of items representing different social provisions, those that best described their relationships. A Latent Class Analysis of children's responses yielded cultural differences in item selections. Canadian children tended to perceive their parents as important sources of enhancement of self-worth and protection. Cuban children tended to select descriptors of parent support that reflected intimacy and emotional support. Chinese children viewed their parents as important sources of teaching, assistance, and support. Children in Brazil and Italy described their parents as offering various types of support. Findings for friendships were less differentiated across cultures and elicited fewer distinctions among types of support. Findings from the study raise the possibility of important cultural variations in support provisions, which to date remain understudied. These differences in support provisions across cultures may reflect cultural differences in prevailing ideologies and social organizations, particularly distinctions between individualistic and collectivistic orientations.

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Introduction

The social support provided by individuals in the lives of children is believed to play an important role in children's development and psychological adjustment. Studies have shown social support to enhance psychological well-being, contribute to social, emotional, and cognitive development, and buffer the negative effects of life stress (e.g., Cochran & Brassard, 1979; Cohen & Wills, 1985; Dubow, Tisak, Causey, Hryshko, & Reid, 1991; Sandler, Miller, Short, & Wolchik, 1989). The functional properties or "provisions" of interpersonal relationships have been proposed to be key features in understanding the influence of social support on children's adjustment and development (Barrera, 1986). A literature on the provisions of children's relationships has been accumulating over the years, describing features of children's relationships with parents, siblings, friends, and other relations, including imaginary relationships and various age groups (e.g., Bukowski, Hoza, & Boivin, 1994; Furman & Buhrmester, 1985; Gleason, 2002). Few studies, however, have examined this issue from a cultural perspective and is the purpose of the present investigation.

Provisions of Children's Relationships

Social support has been defined, conceptualized, and assessed in various forms throughout the adult and child/adolescent literatures. Reviews by Barrera (1986), Wolchik, Beals, and Sandler (1989), and Winemiller, Mitchell, Sutliff, and Cline (1993) illustrate this diversity. Early definitions, for example by Caplan (1974) referred to social support as "continuing social aggregates that provide individuals with opportunities for

feedback about themselves and for validations of their expectations of others" (pp. 4-5). According to Caplan, in times of need, supportive individuals would provide information, guidance, tangible resources, and emotional sustenance. Another early theorist, Cobb (1976) defines social support as information that leads a person to believe that she or he is cared for and loved, is esteemed and valued, or belongs to a network of communication and mutual obligations.

Several authors have noted that in much of the early literature, social support tended to be treated as a broad, global entity and argued that much could be gained from distinguishing different facets of support such as the distinction between structural aspects (i.e., network size, network composition) and functional aspects of relationships (i.e., the content of support, types of support; what relationships bring, provide; the qualitative aspects of relationships) (Barrera, 1986; House, 1987). Studies of social support currently making these distinctions have demonstrated that the different facets of support are important in understanding relationships and how they contribute to well-being, adjustment, and developement. One line of inquiry has focused on the functional aspects of relationships and is based on the assumption that relationships supply "provisions" to individuals (Weiss, 1974).

An influential theoretical framework for thinking about interpersonal relationships came from Weiss (1974). Weiss posited that relationships can be understood and differentiated according to the functions of support or "social provisions" they supply to individuals. According to Weiss, six basic provisions are found in personal relationships:

attachment, social integration, opportunity for nurturance, reassurance of worth, reliable alliance, and guidance. He hypothesized that individuals derive and seek specific provisions or types of support from their relationship with others.

According to Weiss (1974), attachment is provided by relationships from which individuals gain a sense of security and place. In these relationships, individuals feel comfortable and at home. Attachment-providing relationships are also characterized by affection and intimate disclosure. Relationships that offer companionship and opportunities for social engagement, social activity, and the sharing of experiences contribute to social integration. Some relationships offer an opportunity for nurturance or taking care of another. Relationships can also provide a reassurance of worth, which attests to an individual's competence in a social role. As well, relationships may provide a sense of reliable alliance wherein individuals can expect continuing assistance. Individuals can also obtain guidance from certain relationships, characterized by aid and advice (Weiss, 1974). Weiss also suggested that although relationships can share certain dimensions, they also have unique features. Certain provisions may be more common in certain relationships (e.g., companionship may be more common in peer relationships than parent-child relationships).

Although different approaches can be found in the social support literature regarding the conceptualization of the functional aspects of relationships (e.g., House, 1981 in the adult literature), Weiss' theory has been influential, particularly in the child/adolescent literature. His theory has generally been supported in studies of

children's perceptions of their social networks and has served as a basis for many of the commonly used social support scales or scales of "relationship quality" (e.g., Berndt & Perry, 1986; Bukowski, Hoza, & Boivin, 1994; Furman & Buhrmester, 1985; Wolchik, Beals, & Sandler, 1989). One of the advantages of his theory is that it provides a common conceptual framework for the study of multiple relationships given that types of support are found in differing degrees in different types of relationships (Furman & Buhrmester, 1985).

For long, the study of children's social networks had been fragmented, with some researchers looking at parent-child relationships, and others, looking at friendship. These lines of research were conducted in isolation. Examining characteristics of relationships in a broader range of individuals allows for a better understanding of the social provisions afforded by different network members. There is increasing agreement among researchers that multiple sources of support should be included in the study of support provisions because of evidence that there are differences among relationships within a social network. For example, Cauce, Felner, and Primavera (1982) found through a factor analysis of the helpfulness of various supporters that children distinguished between support providers. Their findings revealed 3 factors: formal supporters (school personnel), family supporters, friends supporters. Richman, Rosenfeld, and Bowen (1998) found that middle-school students indicated friends as their primary source of listening support; parents and friends as their primary source of appraisal support; and neighbors as their primary source of tangible assistance. Dubow and Ullman (1989) found that children

reported their mothers were a top provider of all types of support (e.g., emotional, tangible, informational) and their fathers and friends followed mothers in frequency ratings. Siblings were high on emotional support; grandparents high on tangible support; teachers on informational support. Furman and Buhrmester (1985) found that mothers and fathers provided affection, reliable alliance, enhancement of worth, and instrumental aid. Mothers provided more companionship for children than did fathers. Friends provided the most companionship. Friends and mothers were high sources of intimacy.

Most of the data available to date on the provisions of children's relationship with family and friends have been carried out with North American samples. Little is known about the similarity or differences in the provisions of children's relationships in other cultures. Cross-cultural research has provided evidence of cultural variations on a wide range of parameters including national values, norms, beliefs, and the economic lives and social organization of countries. These cultural variations may have implications for interpersonal relations.

Relationship Provisions and Cultural Context

Tietjen (1989) proposed an ecological perspective for understanding social support and suggested that the form and functions of children's social support systems may be influenced by environmental and personal factors as part of a culturally organized ecological system. According to Tietjen's theory, different ecological circumstances would result in support systems with different forms and functions which would develop in such a way as to promote "context-appropriate competence" and thus prepare children

to become competent persons within the particular ecological context in which they live. According to this view, the provisions provided by network members could vary from one culture to another depending on the specific competencies required to adapt to the ecologies of different cultures.

Among the many differences that exist among cultures, societal value priorities are believed to be key elements of cultures that influence the social arrangements, beliefs, customs and practices of societies and relate to all aspects of individual behaviour (Hofstede, 1980; Schwartz, 1999; Smith & Schwartz, 1997). Large scale multi-national studies such as those of Hofstede (1980) and Schwartz (1994) have identified several dimensions of national values along which cultures can be differentiated. These national values reflect the value priorities that are placed within cultures. One of these is the notion of individualism-collectivism or independence-interdependence which describes the value placed on the relation between the individual and the collectivity (Hofstede, 1980; Markus & Kitayama, 1991; Triandis, 1990). This distinction among cultures has widely been considered the most important and fundamental dimension of cultural variability. It has been invoked to explain cultural differences within a host of behavioural, cognitive, emotional, and motivational domains among others (Triandis, 1990). This cultural distinction may thus be particularly useful for the study of interpersonal relationships.

In some cultures, such as the North American and many Western cultures, a great emphasis is placed upon individual needs and desires as well as achievement, ambition,

success, and the pursuit of personal goals. In these cultures which are said to have an individualistic value orientation, individuals are encouraged to become autonomous, self-reliant, and to take care of themselves and their immediate families (Hofstede, 1980; Triandis et al., 1993). In societies characterized by individualism, the emphasis is on promoting self-interest. Individual rights, self-realization, individual initiative, and decision-making are highly valued. Personal identity is defined by the individual's attributes. Individuals in individualistic societies are also encouraged to become emotionally detached from groups to which they belong and have loose social associations (Hofstede, 1980; Triandis, 1995).

In contrast, in other cultures, including many non-Western cultures, personal identity is not viewed as an independent entity separate from the collective but instead, as fundamentally interdependent with others (Hofstede, 1980; Markus & Kitayama, 1994). Such cultures are said to have a collectivistic value orientation and to emphasize close ties among individuals, family security, tradition, conservatism (Hofstede, 1980; Schwartz, 1994). Individuals in collectivistic societies are taught to seek a sense of connectedness and interdependence between the self and others (Markus & Kitayama, 1994; Triandis, 1990). In these societies, the self is inherently social and the major normative task is not to maintain independence of the individual as a self-contained entity but instead to maintain interdependence with others (Markus & Kitayama, 1994). Others are crucially important in the very definition of the self. Great importance is placed on the individual's loyalty to the group and on the relationship between the self and others.

Tuning into, being sensitive to others, and maintaining harmonious relationships are fundamental goals. Other features include reduced personal privacy, a belief in the superiority of the group compared to individual decisions, and emotional dependency on groups and organizations. Triandis and his colleagues (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988) have documented that individuals who have more collectivistic tendencies (i.e. allocentrics) have fuller and more intimate social support networks than individuals who share more individualistic values (i.e. idiocentrics). In one study cited by Markus and Kitayama (1994; Chao, 1993), 64% of European-American mothers compared to 8% of Chinese mothers considered that building children's sense of themselves is an important goal of child rearing. This finding further highlights the distinction between collectivistic and individualistic value priorities.

This distinction among cultures in terms of individualistic and collectivistic value priorities provides a starting point for understanding differences in cultural definitions of appropriate behaviour or competence and the role of ecological factors in influencing how children develop context-appropriate competencies. Many theorists believe that the interpersonal relationships of individuals within a society relate to a great extent to the degree of individualism or collectivism that characterizes the culture (e.g., Dion & Dion, 1991; Gudykunst & Ting-Toomey, 1988; Tietjen, 1989; Triandis, 1994). These dimensions are seen as providing a structure for social behaviour in which interactions between individuals reflect the prevailing ideology of the culture. Tietjen (1989) argued that differences in the social support networks of children covary as a function of

societies' relative emphasis on individualism or collectivism and that differences in the provisions provided by network members may be important in developing the specific competencies required to adapt to the ecologies of different cultures. For example, this author hypothesizes that in societies where group values and interdependence are emphasized, social support systems that would be adaptive for developing appropriate competence are the types of support that contribute to the development of social relatedness and integration. Companionship, intimate disclosure, understanding, assistance would be examples of relationship provisions that might contribute to the development of social relatedness and integration and thus be particularly salient in collectivistic cultures. These characteristics would serve to preserve the interpersonal relationships that are given high priority in collectivistic cultures. In such cultures, individuals are socialized to value harmonious relationships transcending personal interests. Esteem support or types of support that would lead to self-competence, for example, would be expected to be less important. In contrast, in cultures that have an individualistic value orientation, individuals may derive from their relationships types of support that would contribute to the development of their personal needs and independence. As well, they may derive types of support that would contribute to the achievement of personal interests and welfare, such as reassurance of worth, sense of security, and protection. All of these would be important for developing appropriate competencies for the cultural context.

In addition to cultural differences along the individualism/collectivism dimension,

other cultural variations may be associated with cross-cultural differences in social support. Kagitcibasi (1997) suggests that variables such as socioeconomic development, education, income, type of employment, urban-rural standing, which are all defining conditions under which people live, may also account for some of the characteristics assumed to be correlates of individualism/collectivism. Differences along these variables may therefore also influence the structure of social supports. For example, poverty and a scarcity of resources may be associated with an equality orientation and a need for individuals to cooperate, share, and work together. In such cultures, relationships that would be adaptive are those characterized by types of support that emphasize social relatedness. Types of support that emphasize self-interest and enhancement of individual self-worth may be less adaptive in this context than it would be, for example, in industrialized societies. In the latter, competition and self-achievement are often the basis for upward mobility for economic activities (Schneider, 1993). Similarly, the social organization of cultures may also contribute to differences in provisions of social support. Important differences in familial living arrangements and in children's amount of social interactions with peers and adults have been noted across cultures (Stanton, 1995; Whiting and Edwards, 1988). In those societies where children live with much of their extended families and where children are allowed to roam about their neighbourhoods and spend large amounts of time with siblings, cousins and other children in their villages, children have greater opportunities for social contact and may seek and derive different provisions from their social support networks than children from other types of

societies. In cultures where children spend a large amount of their time in social interactions, relationships may have developed to offer provisions of support emphasizing social relatedness, such as intimate disclosure, companionship, understanding, rather than provisions emphasizing the promotion of self-interest and self-enhancement. The development of provisions emphasizing social relatedness would enable children to develop the appropriate competencies for their ecologies.

Therefore, the hypothesis that cultural context may have an important impact on provisions of social support appears well founded. To date only a few studies have examined this issue. The dimensions of individualism-collectivism have been the most widely employed variable in considering the impact of culture on support. These studies are reviewed next.

Cultural Variations in Relationship Provisions

DeRosier and Kupersmidt (1991) compared children's perceptions of the support received from family members, best friends, and teachers in two cultures that fall at extremes of the individualism/collectivism dimension: the United States and Costa Rica. These researchers administered the *Network of Relationships Inventory* (*NRI*; Furman & Buhrmester, 1985), a rating scale measure of six social provisions, to fourth and sixth-grade children in Costa Rica and compared their results to those of a similar study conducted with US children (Furman & Buhrmester, 1985). Among other findings, this study revealed that Costa Rican children perceived higher levels of companionship in all their relationships than did children in the United States. Children in the two countries,

however, reported a similar level of companionship from their best friendships. As well, Costa Rican children reported higher levels of intimacy in their relationships than did US children, again with the exception of best friends where the level of intimacy reported was similar in both countries. Costa Rican children also reported higher levels of affection than did US children in relationships with mothers, siblings, grandparents, teachers and best friends, and similar levels with fathers.

French, Rianasari, Pidada, Nelwan, and Buhrmester (2001) conducted a similar study, also using the *NRI*, in which they compared children's perceptions of support from family members and friends in the United States and another collectivistic culture, Indonesia. Indonesian children reported higher levels of companionship than US children in their relationships with their mothers and their siblings. The reverse was found for friends. Indonesian youth also reported more intimacy with their siblings than did US youth.

A study conducted by Dayan, Doyle, and Markiewicz (2001) also provides insight into possible differences in relationship provisions as a function of value orientation. These researchers administered the *NRI* as well as a measure of idiocentrism/allocentrism (equivalent to the individualistic/collectivistic orientations at the individual rather than cultural level) to French-speaking Canadian children. They found that children with allocentric value orientations (collectivistic tendencies) perceived more intimacy and companionship in their relationships in general than did children with idiocentric value orientations (individualistic tendencies). Moreover, there was a positive association

between idiocentric values and self-esteem which was not evident in more allocentric individuals.

All these studies reinforce the notion that provisions of support may vary across cultures. In addition, they suggest that value orientation or individualism-collectivism may be one explanation for these differences. Examining relationship provisions in a wider range of cultures would provide further evidence of possible associations between value orientations and relationship functions. As French et al. (2001) mention, investigating patterns of social support in cultures that are different from those previously studied but similar on certain aspects, such as their individualistic or collectivistic value orientation, can strengthen conclusions about possible reasons for cultural variations in relationship provisions. An examination of the effects of gender could also help "unpackage" links between wider societal factors and social support provisions and provide further support for Tietjen's theory, as is explained in the next section.

One of the limitations of previous studies is the use of rating scales that may elicit response biases, particularly in cross-cultural research. Response bias has long been recognized as a limitation of rating scales (Paulhus, 1991) but has been raised as an issue of particular concern for cross-cultural research (Poortinga, 1989; van de Vijver & Leung, 2000). Results from cross-cultural studies have revealed that cultures appear to differ in response styles, and this has led some authors to suggest that such differences may provide contaminating influences on cross-national comparisons (e.g., Bachman & O'Malley, 1984; Chen, Lee, & Stevenson, 1995). For example, Bachman and O'Malley

(1984) found that African-American adolescents were more likely than White adolescents to select extreme values such as "agree" or "disagree" as opposed to "mostly agree" or "mostly disagree" and suggested that these may account for the differences in self-esteem often reported between African American and White individuals. Chen, Lee, and Stevenson (1995) found that Asian groups (China and Japan) demonstrated greater use of the mid-point in rating scales as compared to North American groups (US and Canada). The reverse was found for extreme values. In addition, their study pointed to a link between the social orientation of participants and response style preferences, with an individualistic orientation found to be positively related to the use of extreme scale values and negatively related to the use of the mid-point. (The researcher's interpretation was that collectivists might be responding on the basis of group norms and not wanting to stand out from a crowd whereas individualists might be responding on the basis of individual preferences).

Some authors suggest that the use of a forced-choice measurement format would help minimize the involvement of response styles (Baron, 1996; Cheung & Chan, 2002). Such a format would also allow for a more accurate assessment of cultural differences in preference for certain functions relative to others for different relationships. A forced-choice format would also be a strategy to overcome the problem of high overlap among relationship functions that has often been reported (e.g., Berndt, 1989; Furman & Buhrmester, 1985; Wolchik, Beals, & Sandler, 1989).

Gender and Support Provisions

Several authors have suggested conceptual parallels between culture and gender, with girls being more relationship oriented and sharing many of the tendencies found in collectivistic cultures and boys being more task-oriented and instrumental and sharing many of the characteristics of individualistic cultures (Dion & Dion, 1991; Markus & Kitayama, 1991). Social role theory describes girls as being more relational, expressive, communal and to assume more person-oriented roles (Prince-Gibson & Schwartz, 1998). Boys on the other hand tend to be described as more autonomous, instrumental, agentic and assuming more task-oriented roles. For girls, the self is believed to be construed in the context of relationships and is viewed as interdependent, whereas for boys, it is believed that the self is construed as independent and more autonomous (Markus & Kitayama, 1991). These distinctions between male and female characteristics resemble the distinctions between individualistic and collectivistic societies previously described. These differences suggest that boys and girls may seek and derive different provisions of support from their relationships. We would expect, using Tietjen's (1989) theory, that girls might derive more relation-oriented support from their relationships whereas boys might derive types of support that would enhance their ability to become autonomous in order for each gender to adapt to their respective ascribed social roles. However, social role theory also posits that distinctive male and female roles are culturally determined and reinforced by cultural ideology. Although in many cultures the masculine role is seen as independent, assertive, competitive, and the female role as involving dependence,

nurturance, and warmth, there are cultures in which these roles are reversed (Block, 1973). In addition, cultures vary in the extent to which gender roles differ and in the rigidity ascribed to gender role differences. Hofstede (1980; 1983) found cultures to vary along a masculinity-femininity continuum reflecting variations in the degree to which more male oriented values, such as achievement, assertiveness, material success, or female oriented values, such as relationships, modesty, interpersonal harmony were emphasized. Thus, there may be important cultural influences on boys' and girls' perceptions of support provisions.

The Present Study

The present study is a cross-cultural examination of children's perceptions of their relationships with their mothers, their fathers, and their best friends, in five very different cultures: the Southern region of Brazil, Canada, Cuba, the People's Republic of China, and Southern Italy. These cultures represent a wide variation of values along the individualism/collectivism dimension, with English Canada sharing the highly individualistic orientation of the United States, China and Cuba reflecting the collectivistic orientation found in Asian and Latin American cultures, and Italy and Brazil representing a mixture of both individualistic and collectivistic values (Hofstede, 1980; Schwartz & Ros, 1995). Among the five cultures, Canada represents the most individualistic culture and was ranked highly on this dimension in Hofstede's (1983) classification of fifty-three cultures. English-Canada is known to share the same value priorities of individual autonomy and self-promotion as the United States (Schwartz &

Ros, 1995).

Italy represents a Western-European value orientation which, like individualist cultures, emphasizes individual autonomy. However, Italy also values concern for harmony and the general welfare of the group (Schwartz & Ros, 1995). Although individuals in both North American and Western-European cultures set a priority on individual autonomy, they show a marked difference in the degree to which they also accord priority to helping, social justice, interpersonal harmony (Schwartz & Ros, 1995). It has been found that Italian people, particularly those of Southern Italy, attach great importance to interpersonal relationship and to a certain extent, greater than authority, prestige, and career advancement (Trentini & Muzio, 1995). Moreover, despite the individualistic value tendencies that are evident in Italy, involvement with the extended family remains highly important (Moss, 1981; Lanaro, 1992, cited in Schneider, Fonzi, Tani, & Tomada (1997). Sharing of personal information and a high level of expression of emotions are also frequently observed among Italians (Argyle, Henderson, Bond, Iizuka, & Contarello, 1986). Italy has also historically been classified as a "Masculine" culture (Hofstede, 1983), with patriarchal family organizations being common and women assuming most of the caretaking responsibilities.

Brazil is another culture that shows a mixture of values and traditions. According to Hofstede's (1983) classification, Brazil is on the lower end of the individualism dimension (i.e. considered to have a more collectivistic orientation). Interpersonal relationships are valued in Brazil and the culture encourages individuals to develop

loyalty to family members and intimacy with friends. However, Brazil is a country with large economic, geographic, and ethnic variations where a mixture of modern and traditional values can be found. The southern region of Brazil is comprised mostly of individuals of European descent and is considered the more "modern" and "westernized" region of the country (Haidt, Koller, & Dias, 1993; Nucci, 1997). It contains large industrial cities and is the most economically developed area of the country with the highest index of urban population (Benetti, 1999). Thus, although Brazil has been found to share the collectivistic value orientation of other Latin American cultures (Hofstede, 1983), individualistic values have accompanied the industrial development of the country (Levine, 1999; Rosen, 1973). The family has remained a strong institution where parents are highly involved in their children's lives (Benetti, 1999) and where extensive kinship ties are common (Harrison, 1983). Family living arrangements tend to include members of the extended family (grandparents, aunts, uncles, cousins) referred to as *parentela,* particularly in the middle and upper-class and children are expected to remain at home until marriage (Harrison, 1983). Brazilians tend to feel a strong sense of family loyalty and consider it an automatic duty to help family members (Harrison, 1983). Despite this strong sense of family unity and parental involvement in children's lives, parents also encourage their children to develop a sense of individuality (Nucci & Milnitsky Sapiro, cited in Nucci, 1997). A strong sense of social responsibility and positive social interactions is also evident in Brazil. Individuals tend to engage in behaviours that correspond to social norms and that are valued by the greater collectivity rather than for

their self-interest (Bontempo, Lobel, & Triandis, 1990; Scheibe & Spaccaquerche, 1976). Parents place a high importance on encouraging their children to share toys, to be affectionate toward others, to be polite, and to behave responsibly (Haas, 1988). Being *simpatíco*–behaving with dignity and respect toward others and striving for harmony in interpersonal relationships is highly valued in Brazil and other Latin American cultures (Triandis, Marin, Lisansky, & Betancourt, 1984). Brazil has also been known historically to share some the machismo tradition commonly described in Latin cultures and to be a society in which women have traditionally occupied a very secondary position in terms of business, education, and social freedom and mobility (Benetti, 1999).

In Chinese societies, collectivistic values prevail. There is an emphasis on the subordination of personal goals for the sake of preserving in-group integrity, interdependence among members, and harmonious relationships (Markus & Kitayama, 1991). Yang (1981) maintained that Western socialization may be characterised as a self-orientation, whereas the socialization of the Chinese is predominantly a social orientation. Rather than grow to be independent of the family network, the Chinese are brought up to maintain close family ties and responsibilities all their lives. Social orientation is characterised by strong parental control, acceptance of status hierarchy, and powerful norms of loyalty (Chinese Culture Connection, 1987; Hofstede, 1980; Yang, 1981). There is an emphasis on harmony, social obligations, and interrelationships. Chinese culture is deeply influenced by Confucianism which holds as a main tenet that personal happiness is consonant with social welfare and depends on maintaining harmonious human relations

(Matsudaira, 2003). Filial piety is also emphasized, construed as parents taking care of their children during childhood and in return children taking care of their aged parents when they reach adulthood, therefore promoting the interdependence of family members throughout their lives (Matsudaira, 2003). Interdependence among friendships is also emphasized in Chinese culture, with friendship relations, once developed, being as intimate as that among family members throughout their lives (Matsudaira, 2003). In addition to the strong emphasis on social connections in Chinese culture, there are also important cultural beliefs about learning influenced by Confucian teaching (Li, 2004; Stevenson & Lee, 1990). Parents are very involved in their children's education and teach their children to believe in effort rather than ability as leading to achievement (Li, 2004; Stevenson & Lee, 1990). One of the goals of learning is to make social contributions to the larger world, consistent with the collectivistic orientation of the culture. In Hofstede's (1983) classification of national values, China scored in the mid-range on the Masculinity-Femininity dimension.

In Cuba, the collectivism of Latin-American society is reinforced by the collective political ideology. Cubans depend to a great degree on their families and friends for both emotional support and every day practical assistance (Moses, 2000). As in many collectivistic societies, close bonds with extended family members is prominent in Cuba. Familism is a core value that includes an individual's strong identification with and attachment to the nuclear and extended family along with strong feelings of loyalty, reciprocity, and solidarity among family members (Cooper, Baker, Polichar, & Welsh,

1993; Marin & Marin, 1991; Rodriguez, Mira, Myers, Morris, & Cardoza, 2003). Cuba was not included in Hofstede's (1983) classification of cultures, but descriptions of Hispanic cultures often make reference to the machismo tradition which encourages males to be emotionally detached, masculine, and dominating within the family and females to be the predominant caretaker of children, as DeRosier and Kuperdsmidt (1991) explain.

Objective. The main goal of the study was to explore further the possible association between cultural context and social support provisions using a broader range of cultures than previously studied and a forced-choice measure of preference for types of support rather than ratings. We were interested in uncovering cultural differences in the endorsement of certain types of provisions and determining whether these differences reflected the value orientations and social organization of cultures. We examined this association for three target groups: mothers, fathers, and best friends. We also included gender as an additional variable of interest which may help "unpackage" links between wider societal factors and social support provisions.

Hypotheses

Hypothesis 1: Relation-oriented support. Children from more collectivistic cultures will endorse types of support that emphasize social connectedness and integration a) to a greater extent than types of support that focus on the self and b) to a greater extent than children from more individualistic cultures.

Specifically for *H1*: Cuba, China > Brazil, Italy > Canada

Hypothesis 2: Self-oriented support. Children from cultures with individualistic characteristics will endorse types of support that focus on the self a) to a greater extent than supports that focus on the relationship between self and other and b) to a greater extent than cultures with more collectivistic characteristics.

Specifically for *H2* : Canada > Italy, Brazil > China, Cuba

Hypothesis 3: Gender differences. Girls will be more likely than boys to endorse types of support that are more relation-oriented, particularly in cultures with more rigid and traditional gender roles (Italy, Cuba, Brazil).

Method

Participants

A total of 1101 grade 6 children from five metropolitan areas- Great Florianópolis (Southern Brazil), Ontario (Canada), Shanghai (People's Republic of China), Palermo (Italy), and Santa Clara (Cuba)- participated in this portion of a larger collaborative study on social relationships and socio-emotional and school adjustment in childhood and adolescence. The number of participants from each region and the gender composition of each sample are presented in Table 1. The adults participants indicated living with are also included in Table 1. As Table 1 shows, the majority of children in all countries lived with either both their mothers and fathers or with their mothers in other combinations (mother only or mother and step-father). There appears to be some variations in living arrangement between the samples (e.g., lower percentage of the Cuban sample living with both mothers and fathers) but these should be interpreted with caution as it is unclear whether these differences reflect true differences or differences in the coding strategies used in the different countries. Over 80% of children from each country with the exception of China reported having one or more siblings. Due to the "one-child-per-family" policy that was implemented in the late 1970s, 97% of the Chinese children were only children.

The schools that were selected for the study were predominantly attended by children from the "middle class" in each country, according to the standards of the

Table 1

Characteristics of the Samples

Sample characteristic	Brazil	Canada	China	Cuba	Italy
Total *N*	409	117	279	102	194
Gender composition					
Boys	204	58	122	41	102
Girls	205	59	155	61	92
Living arrangements (in %)					
Mother & father	75.1	86.3	87.8	48.0	92.8
Mother	13.4	7.7	1.8	18.6	5.2
Father	2.4	1.7	3.2	2.0	1.0
Mother & stepfather	5.9	.9	.7	18.6	1.0
Father & stepmother	1.2	.9	0	0	0
Other individuals[a]	.5	2.1	1.4	10.8	0

[a]This category refers to children who indicated living with individuals other than their parents or step-parents (e.g., grandparents, aunts, uncles, cousins).

country. The schools were considered to be "average" schools in each site and served students that mostly came from the area where the schools were located. Samples were randomly selected in each school and are considered to be representative of the population of children in each area. One of the particular challenges in cross-cultural research is ensuring the representativeness of samples and limiting variations in demographic characteristics such as socio-economic status. Although several international occupational prestige scales have been developed over the years, classification across nations continues to pose challenges (Ganzeboom, 1996; Treiman, 1975).

More than half of the participants in each sample reported the length of their best friendship to range from 1 year to 3 years or more. Specifically, the percentage of children reporting knowing their best friend for more than one year were 68.7%, 85.5%, 61.6%, 59.8%, and 55.2% in the Brazilian, Canadian, Chinese, Cuban, and Italian samples, respectively. The vast majority of children in each sample also reported that these were same-sex friendships.

Procedure

We collected data for this study during the collection of data for a larger project. Psychology teachers and graduate students in each country group administered the measures in classrooms to students who had parental consent. Along with other measures for the larger study, students completed *the Children's Social Network Scale* (*CSNS*) (Chen, Kaspar, & Field, 1998), a measure of children's perceptions of their relationships

with their mothers, fathers, and best friends, developed on the basis of the *Network of Relationships Inventory* (*NRI*, Furman & Buhrmester, 1985). The measures were translated using the translation-back-translation method, wherein English versions of measures are translated to another language and subsequently translated back to English to ensure comparability with the original version.

Measure

A measure of children's perceptions of the functions of their relationships with their mothers, fathers, and best friends (*The Children's Social Networks Scale*, *CSNS*) was developed for the purpose of this study (Chen, Kaspar, & Field, 1998). This measure was developed on the basis of previous scales on functions of children's relationships (e.g., *Network of Relationship Inventory*, Furman & Buhrmester, 1985) but employed a forced-choice ranking format rather than a standard Likert-scale rating format. That is, rather than presenting participants with a list of questions tapping various relationship functions and asking them to indicate on a standard Likert scale how much each function occurs in each of their relationships (e.g., "How much free time do you spend with each of these persons?"), we presented participants sets of statements representing different relationship provisions and asked them to choose from each set the statements that were most, second most, and third most descriptive of each of their relationships with their mothers, fathers, and best friends.

The measure contained a total of 24 items presented in four sets of six items, with each item within a set designed to represent one of six functions: instrumental aid,

understanding, security-protection, enhancement of self-worth, companionship and intimate disclosure (see Appendix A to view the measure). These items were found to reflect these functions in a series of pilot studies (Field, 1995; Kaspar & Chen, 1998). The items were developed with the goal of distinguishing *self-oriented* relationship provisions from *relation-oriented* provisions. Half of the items were considered to reflect self-oriented functions (items 1, 3, 4 in section A; 3, 5, 6 in section B; 3, 4, 6, in section C; 1, 3, 6 in section D; referred to as items 1, 3, 4, 9, 11, 12, 15, 16, 18, 19, 21, 24, respectively, in upcoming tables). The other half were considered to reflect relation-oriented functions (items 2, 5, 6 in section A; 1, 2, 4 in section B; 1, 2, 5 in section C; and 2, 4, 5 in section D; referred to as items 2, 5, 6, 7, 8, 10, 13, 14, 17, 20, 22, 23, respectively, in upcoming tables). Items representing the different functions were presented in random order in each set. For each participant, responses to each of the 24 items were coded 3, 2, 1, or 0 (*most true*, *second most true*, *third most true*, *not selected*, respectively), separately for each relationship (mother, father, friend).

Data Analysis

Ipsative measures such as this one, where a forced-choice item selection format is used, have by their very nature, properties that subject them to violations of some of the basic assumptions of statistical theory (Baron, 1996) and require non-traditional data analytic strategies.

Properties of ipsative measures. In a detailed overview of properties of ipsative measures, Hicks (1970) explains that because of the item presentation format where scale

items compete with one another in each set of items, one of the properties of ipsative measures is the creation of non-independence between scales. For example, the selection of one item in a set as *most true* prevents the selection of another item in that set for that same rank. Thus, each scale score for an individual will be dependent on his or her own scores on other variables and can be predictable from knowledge of the individual's other scores.

Another property of ipsative measures, is that each participant's total score will always equal the same constant for each person (i.e., the available rankings) (Hicks,1970). In our case, where participants' responses are coded as 3, 2, 1 and 0 for *most true*, *second most true*, *third most true*, and *not selected* respectively, in each of four sets of items, for each of three relationships (mother, father, friend), the total score for each participant on the entire measure will always equal 72 (i.e., [3+2+1+0] x 4 sections x 3 relationships). This is in contrast to rating scales where participants rate every item, say, from 1 to 5 which allows the total score to differ for each participant.

In addition, ipsative measures yield scale scores that represent the relative strength of constructs for each individual, rather than an absolute score (Closs, 1976; Hicks, 1970). That is, scale scores (in our case, scores for each of the six functions) would indicate preferences for scales relative to each other *within each individual* and provide us with the relative ordering of scales or functions for each individual and not absolute measures.

Statistical implications. Much has been written about the statistical implications

of the properties of ipsative measures, with many authors arguing that these measures give rise to statistical issues that seriously undermine the validity of traditional statistical procedures (e.g., Closs, 1996; Cornwell & Dunlap, 1994; Johnson, Wood, & Blinkhorn, 1988; Hicks, 1970). It has been demonstrated, for example, that data derived from ipsative measures give rise to artifactual internal consistency reliability estimates, imposed negative multicollinearity, spurious correlations, and invalid factor solutions (Closs, 1996; Dunlap & Cornwell, 1994; Johnson, Wood, & Blinkhorn, 1988; Loo, 1999; Tenopyr, 1988). One of the problems is that because of the properties of ipsative measures, particularly the built-in dependencies among scores, the intercorrelation matrix of such measures will tend to have many negative entries even when only positive correlations are expected given the conceptual relationships among the variables (Cornwell & Dunlap, 1994; Dunlap & Cornwell, 1994). With spurious correlations present among scales, ordinary factor analysis breaks down, typically generating degenerate and illegal solutions because factor analysis methods usually rely on a covariance or correlation matrix (see Closs, 1996; Cornwell & Dunlap, 1994; Dunlap & Cornwell, 1994; Johnson, Wood, & Blinkhorn, 1988; Loo, 1999).

In addition, Johnson, Wood, and Blinkhorn (1988) explain in their review of statistical issues arising from ipsative measurements, that ipsative measures, by definition and by their construction, have no random error component as such because scale scores can be perfectly predicted from scores on the other scales. They further explain that typically the purpose of estimating the reliability of a measure is to quantify the degree of

random error which is assumed to be present among test scores but does not exist in ipsative measures. In fact, Tenopyr (1988) demonstrated using simulated ipsative data sets that internal reliability calculations will not produce valid results.

In addition to psychometric analyses being compromised with ipsative data, it has also been shown that means and standard deviations derived from such data are not independent and cannot be interpreted and used in the usual way, such as for comparisons between individuals on a scale by scale basis, for example (Closs, 1996; Cornwell & Dunlap, 1994; Johnson, Wood, & Blinkhorn, 1988).

Baron (1996) further explains that ipsative scores constitute an ordinal level of measurement and represent an intra-individual ordering of the scales of a test. As ordinal measures, they do not meet the criteria for standard parametric analyses, which assume an interval level of measurement. This researcher does point out that it could be argued that Likert-type scales are not "true interval measures" (i.e., that the difference between *agree* and *strongly agree* is not exactly the same as the difference between *disagree* and *neither agree nor disagree*). However, she indicates that the interdependence among scales in ipsative measures creates difficulties beyond those found with Likert scales and that the sum of the ordinal responses to each scale would be meaningless.

These problems have led many researchers to recommend against the use of conventional statistical procedures with data derived from ipsative measures, arguing that such methods will produce uninterpretable and invalid results (e.g., Closs, 1996; Cornwell & Dunlap, 1994; Johnson, Wood, & Blinkhorn, 1988). According to Cornwell

and Dunlap (1994) "....researchers who ignore or discount the problems of ipsative scores are in great danger of misinterpreting their data" (p. 90).

Analytical strategy. To analyse our data from the *Children's Social Networks Scale*, we used a statistical technique known as *Latent Class Analysis*. Latent class analysis (LCA) is a statistical modelling method for identifying and describing associations in multidimensional contingency tables and patterns in which multiple categorical variables co-occur. This method was initially introduced by Lazarfeld (1950), who used the technique as a tool for building typologies based on dichotomous survey items and was later formalized and made applicable in practice by Goodman (1974a, 1974b) who developed an algorithm for obtaining maximum likelihood estimates of the model parameters which forms the basis of the analysis.

Magidson and Vermunt (in press), Magidson and Vermunt (2002), McCutcheon (1987), and Vermunt and Magidson (in press) offer good introductions to LCA and explain that latent class analysis, in some ways, can be considered a qualitative data analog to factor analysis or structural equation modelling because it enables researchers to empirically identify latent (i.e., unobserved) variables from observed variables. However, LCA can be considered more closely analogous to cluster analysis since it is mostly used to discover sub-populations (groups or types of respondents) based on observed data, with patterns of responses from individuals being viewed as indicators of the sub-populations to which they belong. Thus, similar to cluster analysis, LCA is more concerned with the structure of cases than with the structure of variables as in factor analysis (i.e., LCA tends

to focus more on "clustering" individuals rather than response variables). However, unlike traditional cluster analysis algorithms which group cases near each other by some definition of distance, the latent class approach defines one cluster per latent class using model-based probabilities to classify cases. (John Uebersax also has good introductory information on latent class analysis on his website at www.ourworld.compuserve.com/homepages/jsuebersax/index.htm which includes comparisons of LCA with other statistical methods.) LC models do not rely on the traditional modelling assumptions which are often violated in practice and are therefore less subject to biases associated with data that do not conform to model assumptions. LCA has far ranging applications and can be used to find distinct diagnostic categories given the presence/absence of several symptoms, types of attitude structures from survey responses, or to examine sub-populations from answers to test items. The results can also be used to evaluate group differences and make classification predictions based on covariates or grouping variables. Common areas of application have included marketing research, survey research, sociology, psychology, medicine, and education (see Dayton,1991; Magidson, & Vermunt, 2002; Sullivan, Smith, & Buchwald, 2002; Vermunt & Magidson, in press, for examples of applications of latent class analysis). DeCarlo and Luthar (2000), Croon (1989), Croon and Luijkx (1993) also made use of this approach with data similar to ours.

In the present study, we used LCA first as a modelling technique to evaluate the clustering of items of the *Children's Social Networks Scale* (or more precisely, in LCA

terms, to identify possible heterogeneity in the patterns of responding to the measure and subgroups of respondents). Because of the recommendations against the use of means and standard deviations with our type of data, we then used the technique to classify respondents into country and gender groupings based on patterns of responding to evaluate our hypotheses.

To run the analyses, we used the commercial software Latent GOLD 3.0, developed by Vermunt and Magidson (2003) and available from Statistical Innovations. This software uses a fully Windows-oriented user interface, is fast, has extensive graphics, reads data directly from SPSS files, can perform analyses with variables that are continuous, categorical (nominal or ordinal) or counts or any combination of these, and provides the option of including covariates in the model to help predict class membership. There are other software packages available to perform LCA (e.g., MLLSA and LEM) and descriptions of some of these and other programs can be found on Uebersax's homepage:
http://www.ourworld.compuserve.com/homepages/jsuebersax/index.htm).

One of the first steps in LCAis to identify the number of latent classes (i.e. classes representing distinctly different response patterns) that give rise to the observed data. Latent GOLD 3.0 uses a model-based approach that estimates membership probabilities to classify cases into the appropriate clusters. The software uses maximum likelihood estimates to fit the model through iterative computation. The Technical Appendix of the software's user's guide (Vermunt, & Magidson, 2003) contains more specific details on

the mathematical underpinnings of the analysis used in Latent GOLD 3.0.

The original coding of our data, with each item having four possible scores (0 for *not selected*, 3 for *most true*, 2 for *second most true*, and 1 for *third most true*) would render such an analysis very difficult, as it would yield highly complex contingency tables with an enormous number of potential permutations of the data. Moreover, with 1101 observations, this would result in many empty and low-frequency cells, which can pose a challenge for the analysis of contingency tables (Agresti, 1996; Wickens, 1989). Therefore, we chose to re-code our data into dichotomous items, with each item receiving a code of 0 (*item not selected*) or 1 (*item selected*).

The input data corresponded therefore to the 24 dichotomously-scored items for the 1101 participants, run separately for each of the three relationship types (mother, father, friend). As in factor analysis where it is often difficult to determine the number of factors to interpret, the number of latent classes in LCA is sometimes also ambiguous (Sullivan, Smith, Buchwald, 2002). In LCA, the typical approach is to increase the number of classes from the one-class model (H_0: model of complete independence) until the most adequate model fit is obtained. There are several methods for making decisions about the acceptability of the fit of several latent class models and the observed data, such as the statistical significance of goodness-of-fit indices (likelihood-ratio chi-squared statistic), difference chi-square, and goodness of fit measures such as the BIC (Bayes Information Criterion) and AIC (Aikike Information Criterion) among other methods (Vermunt and Magidson, in press). Several authors (e.g., Lin & Dayton, 1997; Sclove,

1987; Vermunt and Magidson, in press) recommend that information criterion indices such as the Akaike Information Criterion (AIC) or Bayesian Information Criterion (BIC) be used for sparse data (which we still have even with our data in dichotomous format) because sparse data can cause severe biases in estimates of likelihood ratio and of chi-square goodness-of-fit statistics and cannot be trusted. Information criteria indices are also valuable as they provide an index of parsimony because they take into account how improvements in goodness-of-fit are counterbalanced by increased complexity due to greater number of parameters (they include a penalty for the number of parameters). Descriptions of information criteria indices can be found in textbooks for categorical analyses such as Agresti (1996). In our analyses, we use the BIC. A model with a lower BIC is preferred over a model with a higher BIC. We also followed the recommendation of McCutheon (1987) to eliminate cases with missing data when conducting LCA to reduce some of the sparseness. We accomplished this by removing from the analysis cases for which no responses were provided for a particular relationship. This led to sample sizes of $n = 1074$ for mothers, 1033 for fathers, and 1064 for best friends.

Once the number of classes is determined, we can examine the response profiles of each class to gain an understanding of the structure of the classes. This is achieved through an examination of estimates of conditional probabilities associated with each indicator (i.e., each item in our case) for each class. This is somewhat analogous to factor loadings in factor analysis and allows us to identify the characteristics of each class. The conditional probabilities associated with each indicator represent the endorsement rate of

each item within each class (i.e., the proportion of individuals within each class selecting each item). Latent GOLD 3.0 also provides an estimate of the contribution of each item to the model. Grouping variables or covariates can also be added to the model to evaluate their contribution to the model and determine if class membership is affected by these. For our purposes, country and gender were the variables added. Latent GOLD performs such an analysis with parameter estimates of a multinomial logit model (*Gammas*). Classification into the different classes can then also be performed on the basis of these grouping variables and further evaluated through frequency analysis.

Results

Overview

The results of the analyses are presented in two sections. The first section consists of preliminary analyses to assess the structure of our measure and determine whether distinct response profiles emerged that reflect different types of support. The second section consists of analyses that assessed the effects of country and gender on patterns of responding. These analyses allowed us to determine whether children's perceptions of the provisions of their relationships with their mothers, fathers, and best friends differed according to the gender and country of the participants and thus evaluate our hypotheses.

Preliminary Analyses: Latent Distribution of Responses

Number of Latent Classes

Tables 2 provides the log-likelihoods, number of parameters, and goodness-of-fit criteria for models with one to six latent classes fit to the data corresponding to children's selections of functions best describing their relationships with their mothers, fathers, and best friends, respectively. The BIC, which is the recommended procedure for model selection in a situation such as ours with sparse data, informs us that for all three relationship targets (mother, father, friend), a three-class solution appears to provide the most adequate fit to the data. For responses in relation to mothers and fathers, the BIC decreases up to the three-class model and increases with the addition of more classes, suggesting three distinctly different patterns of responses. (For father, the BIC decreases

Table 2
Results from Various Latent Class Models Fit to Mother, Father, and Friend Data

Model	Number of Parameters	Mother *(n=1074)*		Father *(n=1033)*		Friend *(n=1066)*	
		Log Likelihood	BIC	Log Likelihood	BIC	Log Likelihood	BIC
1-Class	24	-17167.126	34501.75	-16746.398	33659.36	-16630.480	33428.28
2-Class	49	-16844.152	34030.28	-16550.804	33441.68	-16457.378	33256.37
3-Class	74	-16672.517	33861.49	-16416.739	33347.05	-16329.459	33174.82
4-Class	99	-16593.609	33878.15	-16343.786	33374.65	-16215.476	33121.15
5-Class	124	-16508.111	33881.64	-16227.834	33316.25	-16143.359	33151.20
6-Class	149	-16443.468	33926.83	-16142.666	33319.42	-16055.060	33148.90

again at the five-class model, however, the three-class model provides the best fit as it requires fewer parameters than the five-class model). For responses in relation to best friends, according to the BIC values corresponding to the different class models, a four-class model would appear to best fit this data. However, from further inspection of the three and four class solutions, we noted that the four-class model included a class that was quite small in size (containing only 11% of our total sample) and that this solution was not readily interpretable. We therefore chose to interpret the three-class solution which also used fewer parameters to fit the data and included results tables for the four-class solution in Appendix B for interested readers. DeCarlo and Luthar (2000) employed a similar strategy to ease interpretation of results.

Response Profiles

Tables 3, 4, and 5 show the response profiles for the three-class solution for each of the three sources of support, respectively (mother, father, friend). The proportion of the overall sample in each latent class ranged from 24% to 47%, as seen from the first row of each table (class size). (These estimated proportions are analogous to the prevalence indices used in epidemiological research.) For children's descriptions of their relationship with their mothers, the most discriminating items were item 8 ("I tell this person everything"), 13 ("I share my secrets and private feelings with this person") and 19 ("This person makes me feel good about myself"), with R^2 (amount of variance accounted for) = .25, .28, and .19, respectively (Table 3). Children's response selections for father indicate that the items that discriminated the three response profiles the most

were again items 8 and 13 (R^2 = .20 and .16, respectively) and item 12 ("This person tells me I'm good at things") (Table 4). Items 8 and 13 were also the items that discriminated the most the three classes of responses to children's descriptions of their best friend (R^2 = .34 and .21, respectively), followed by item 14 ("When I want to do something for fun, I can usually find this person", R^2 = .16).

Perceptions of mothers. For children's perceptions of their relationship with their mothers, *Class 1* is characterized by a high proportion of individuals who perceive their mothers as a person that helps them figure out or fix things (item 1), who makes them feel good about themselves (item 19), with whom they share their secrets and private feelings (item 13), to whom they tell everything (item 8), who really understands them (item 2), who they often stay with in their free time (item 7), and who they can count on when they need help with something (item 9) (Table 3). The high endorsement of these items, together with the low endorsement of items 4, "This person makes me feel important and special", 12, "This person tells me I'm good at things", 11, "This person is able to comfort me when I am frightened", and 18 "This person can protect me when I am in trouble", appear to suggest a preference for more relationship-oriented functions. A distinguishing feature of this class of respondents is the significantly higher rate of endorsement of items 8, 13, and 19 relative to the other two classes. As such, we chose to label this class, *Intimacy/Emotional Support.*

Table 3

Response Profiles for the Three Latent Classes of Children's Descriptions of their Mothers

Item	Class 1	Class 2	Class 3	R^2
Class size	.40	.32	.28	
1. This person helps me figure out or fix things.	**.82**	**.66**	**.65**	.03
2. This person really understands me.	.67	.47	**.65**	.03
3. I feel more comfortable when this person is with me in a new place.	.43	.40	.56	.02
4. This person makes me feel important and special.	.30	**.63**	.26	.11
5. I often play around and have fun with this person	.23	.31	.05	.06
6. When I feel really good about something that happened to me, I tell this person about it.	.37	.46	.61	.04
7. I often stay with this person in my free time.	.61	.40	.44	.04
8. I tell this person everything.	**.73**	.15	.57	.25
9. I can count on this person when I need help with something.	.61	**.66**	.43	.03
10. When I'm angry or upset about something, this person tries to be understanding.	.31	.54	.55	.05
11. This person is able to comfort me when I am frightened.	.25	**.62**	.52	.10
12. This person tells me I'm good at things.	.26	.55	.24	.08
13. I share my secrets and private feelings with this person.	**.76**	.13	.47	.28
14. When I want to do something for fun, I can usually find this person.	.41	.22	.11	.08
15. This person treats me like I am important.	.57	**.63**	.26	.09
16. This person teaches me how to do things that I don't know.	.35	**.66**	**.76**	.13
17. This person understands and cares about my feelings.	.39	**.64**	**.73**	.09
18. This person can protect me when I am in trouble	.29	**.62**	.43	.08
19. This person makes me feel good about myself	**.80**	**.67**	.29	.19
20. I often go places and do enjoyable things with this person.	.53	.44	.21	.07
21. I would like to be with this person when I feel scared or uncomfortable in a new place.	.60	.46	.58	.01
22. I talk with this person about the things that make me sad or mad.	.33	.40	.51	.02
23. If something bothers me, this person knows about it.	.26	.47	.58	.07
24. This person helps me when I need to get something done.	.22	.46	.59	.10

Note. The cells of the Table show the proportion of individuals in a class who endorsed a particular item (*conditional probabilities*). The endorsement rates in bold are those that were the highest within a particular class.

Similar to respondents in Class 1, many respondents in *Class 2* (approximately 2/3) also described their mother as making them feel good about themselves (item 19) and as helping them figure out or fix things (item 1). However, respondents in Class 2 also endorsed other items as being important descriptors of their relationships with their mothers, which were items not highly endorsed by members of Class1. These were that their mother teaches them how to do things they don't know (item 17), treats them like they are important (item 15), makes them feel important and special (item 4), and is able to comfort and protect them when they are frightened and in trouble (items 11 and 18). The most salient features of the response profile of *Class 2* respondents are the very low endorsement of the intimacy items 8 and 13 and the high rate of endorsement, relative to the other classes, of items 4, 15, 11, and 18 that reflect a perception of their mother as increasing their self-worth and as offering protection. This profile seems to reflect a preference for more self-oriented functions relative to relationship-oriented functions. We labelled this class *Enhancement of Self-Worth/Protection.*

In the *third class* of respondents, the majority of respondents described their mothers as someone who teaches them how to do things that they don't know (item 16) and who understands and cares about their feelings (item 17). A high proportion also saw their mothers as helping them figure out or fix things (item 1), as understanding them (item 2), and as being someone whom they confide in when something good has happened to them (item 6). The greatest differences between this class of respondents and the other two classes were in regard to items 19 and 15 ("This person makes me feel

good about myself" and "This person treats me like I am important"). Whereas both of these items were selected by a large percentage of respondents in classes 1 and 2, only about 1/3 of respondents in Class 3 selected these items as important characteristics of their mothers. In addition, more respondents in Class 3 than any other class selected items 16 and 17 ("This person teaches me how to do things I don't know" and "This person understands and cares about my feelings"). We therefore labelled this class, *Teaching/Assistance/Understanding.*

Perceptions of fathers. The profile of responses of *Class 1* resembles the pattern of responses represented by Class 2 of the data set for mother (the *Enhancement of Self-Worth/Protection* class) (Table 4). Specifically, children in Class 1 perceive their father as someone that makes them feel important and special (item 4), whom they can count on when they need help (item 9), who tells them they're good at things (item 12), who can protect them when they are in trouble (item 18). Very few in this class perceive their father as someone to whom they tell everything (item 8) or who they share their secrets and private feelings with (item 13). We also label this class *Enhancement of Self-Worth/Protection.*

In contrast, individuals in *Class 2* seem to perceive their father as someone that helps them fix things or helps them when they need to get something done (items 1 & 24), really understands them and cares about their feelings (items 2 & 17), teaches them things and protects them (items 16, 18, and 21), and can comfort them (item 11). This class was also characterized by a low endorsement rate of items relating to enhancement

Table 4

Response Profiles for the Three Latent Classes of Children's Descriptions of their Fathers

Item	Class 1	Class 2	Class 3	R^2
Class size	.47	.29	.24	
1. This person helps me figure out or fix things.	.54	**.75**	**.67**	.04
2. This person really understands me.	.43	**.69**	.59	.05
3. I feel more comfortable when this person is with me in a new place.	.33	.54	.45	.03
4. This person makes me feel important and special.	**.59**	.25	.29	.11
5. I often play around and have fun with this person	.57	.30	.35	.06
6. When I feel really good about something that happened to me, I tell this person about it.	.38	.22	.36	.02
7. I often stay with this person in my free time.	.32	.58	.58	.07
8. I tell this person everything.	.14	.40	**.67**	.20
9. I can count on this person when I need help with something.	**.60**	.58	.52	.00
10. When I'm angry or upset about something, this person tries to be understanding.	.48	.48	.38	.01
11. This person is able to comfort me when I am frightened.	**.59**	**.63**	.29	.07
12. This person tells me I'm good at things.	**.68**	.27	.23	.18
13. I share my secrets and private feelings with this person.	.15	.30	**.62**	.16
14. When I want to do something for fun, I can usually find this person.	.37	.13	.49	.09
15. This person treats me like I am important.	**.57**	.35	.52	.04
16. This person teaches me how to do things that I don't know.	.56	**.67**	.43	.03
17. This person understands and cares about my feelings.	.49	**.61**	.22	.08
18. This person can protect me when I am in trouble	**.70**	**.67**	.31	.11
19. This person makes me feel good about myself	.57	.20	**.63**	.13
20. I often go places and do enjoyable things with this person.	.49	.29	.58	.05
21. I would like to be with this person when I feel scared or uncomfortable in a new place.	.45	.67	.54	.03
22. I talk with this person about the things that make me sad or mad.	.34	.48	.35	.02
23. If something bothers me, this person knows about it.	.49	.45	.31	.02
24. This person helps me when I need to get something done.	.53	.62	.23	.09

Note. The cells of the Table show the proportion of individuals in a class who endorsed a particular item (*conditional probabilities*). The endorsement rates in bold are those that were the highest within a particular class.

of self-worth (item 4, 12, 15, 19) and items relating to fun and companionship (items 5, 14, 20). Responses in this class seem to reflect a perception of fathers as providing more relationship-oriented support with a particular emphasis on *Assistance and Understanding*.

Class 3 in the father data seems to represent a group of individuals who perceive their father as someone who helps them figure out or fix things (item 1) but also as someone to whom they tell everything, with whom they can share their secrets and private feelings, and who makes them feel good about themselves (items 8, 13, & 19). This class exhibited the highest endorsement rate of these latter three items relative to the other classes and seems to reflect a preference for more relationship-oriented descriptors of their father and in particular *Intimacy/Emotional Support*.

Perceptions of best friends. The profile of responses for children's perceptions of their best friendships represented in *Class 1* show a relatively equal endorsement rate of all items and seems to characterize a group of individuals with no clear and consistent preferences for certain items relative to others (Table 5). This group may represent individuals for whom their relationship with their best friend can be described according to many features. This group of individuals, however, showed a preference for certain items relating to security and protection (items 3, 11, 18, and 21) as compared to the other two classes of individuals, as well as items relating to enhancement of self worth (items 4 & 12). This class therefore may also represent a group of individuals with a tendency to perceive *Protection and Self-Enhancement* as important functions of their best friendships

Table 5

Response Profiles for the Three Latent Classes of Children's Descriptions of their Best Friends

Item	Class 1	Class 2	Class 3	R^2
Class size	.34	.33	.33	
1. This person helps me figure out or fix things.	**.48**	.37	.47	.01
2. This person really understands me.	.44	.62	.32	.06
3. I feel more comfortable when this person is with me in a new place.	.45	.38	.23	.04
4. This person makes me feel important and special.	.37	.27	.19	.03
5. I often play around and have fun with this person	**.56**	**.64**	**.87**	.08
6. When I feel really good about something that happened to me, I tell this person about it.	.45	.58	.62	.02
7. I often stay with this person in my free time.	**.52**	**.64**	**.77**	.04
8. I tell this person everything.	.38	**.97**	.34	.34
9. I can count on this person when I need help with something.	**.47**	.57	.51	.00
10. When I'm angry or upset about something, this person tries to be understanding.	**.47**	.32	.37	.02
11. This person is able to comfort me when I am frightened.	.41	.15	.27	.06
12. This person tells me I'm good at things.	**.47**	.24	.38	.04
13. I share my secrets and private feelings with this person.	.45	**.96**	.56	.21
14. When I want to do something for fun, I can usually find this person.	.53	**.81**	**.94**	.16
15. This person treats me like I am important.	.40	.36	.46	.01
16. This person teaches me how to do things that I don't know.	.45	.20	.22	.06
17. This person understands and cares about my feelings.	.41	.42	.36	.02
18. This person can protect me when I am in trouble	**.46**	.15	.16	.11
19. This person makes me feel good about myself	.45	.61	.40	.03
20. I often go places and do enjoyable things with this person.	.39	**.68**	**.80**	.13
21. I would like to be with this person when I feel scared or uncomfortable in a new place.	.40	.36	.18	.04
22. I talk with this person about the things that make me sad or mad.	**.48**	.57	.42	.02
23. If something bothers me, this person knows about it.	**.48**	.35	.28	.03
24. This person helps me when I need to get something done.	**.50**	.29	.51	.04

Note. The cells of the Table show the proportion of individuals in a class who endorsed a particular item (*conditional probabilities*). The endorsement rates in bold are those that were the highest within a particular class.

In contrast, for individuals in *Class 2*, their relationship with their best friend seems to be characterized by a very high level of intimacy and also fun and companionship. Ninety-seven percent of children in Class 2 selected the item "I tell this person everything" (item 8) and 96% selected "I share my secrets and private feelings with this person" (item 13). Close to half of the respondents in Class 2 also selected item 6 "When I feel really good about something that happened to me, I tell this person about it". A high endorsement of companionship items was also characteristic of this group (items 14, 20, 5, and 7). Few individuals in this class perceived their best friend as someone that makes them feel important and special, tells them they're good at things, treats them like they are important, or teaches them things or protects them. This group seems to represent a group of individuals for whom *Intimacy and Emotional Support* are important functions of their friendships.

Class 3 respondents demonstrated a high preference for items representing companionship and fun as descriptions of their relationship with their best friend relative to other functions, with 94% of individuals in that class indicating that "When I want to do something for fun, I can usually this person" (item 14), 87% saying "I often play around and have fun with this person" (item 5), 80% indicating that "I often go places and do enjoyable things with this person" (item 20), and 77% indicating that "I often stay with this person in my free time"(item 7). These were the highest endorsed items of that class. Items least selected by individuals in Class 3 were item 4 "This person makes me feel important and special" (item 21), "I would like to be with this person when I feel scared

or uncomfortable in a new place", and item 18 "This person can protect me when I am in trouble". Thus, enhancement of self-worth and protection functions seem to be less important to this group than fun and companionship functions. We label this group *Companionship*.

Summary of Preliminary Analyses

The modelling analyses using a Latent Class Analysis technique revealed that a three-class model best fit our data for each of the three relationship types (mother, father, friend). For each relationship type, children's response profiles seem to distinguish groups of individuals who derive different types of support from their relationships. For perceptions of relationships with mothers and fathers, the groups appeared to differ predominantly on their preference for *Intimacy/Emotional Support*, *Enhancement of Self-Worth/Protection*, or *Teaching/Assistance/Understanding* as important provisions of their relationships. For children's perceptions of the provisions of their friendships, *Enhancement of Self-Worth/Protection*, *Intimacy*, and *Companionship* were the characteristics that most distinguished the groups. Intimacy, companionship, and assistance/understanding emphasize social connectedness and integration. In contrast, enhancement of self-worth and protection is reflective of a type of support that is more oriented toward the self.

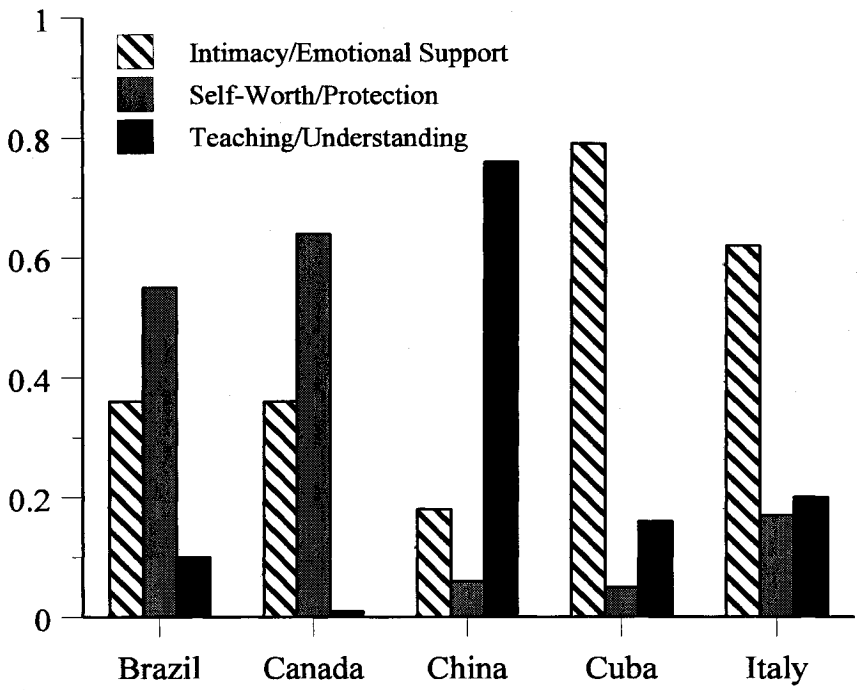
Evaluation of Hypotheses

The main purpose of this investigation was to identify cultural differences in relationship provisions and more specifically determine whether these differences

reflected differences in the value orientation and social organization of the five cultures sampled. We were also interested in the interactive role of gender in differences in perceptions of support provisions.

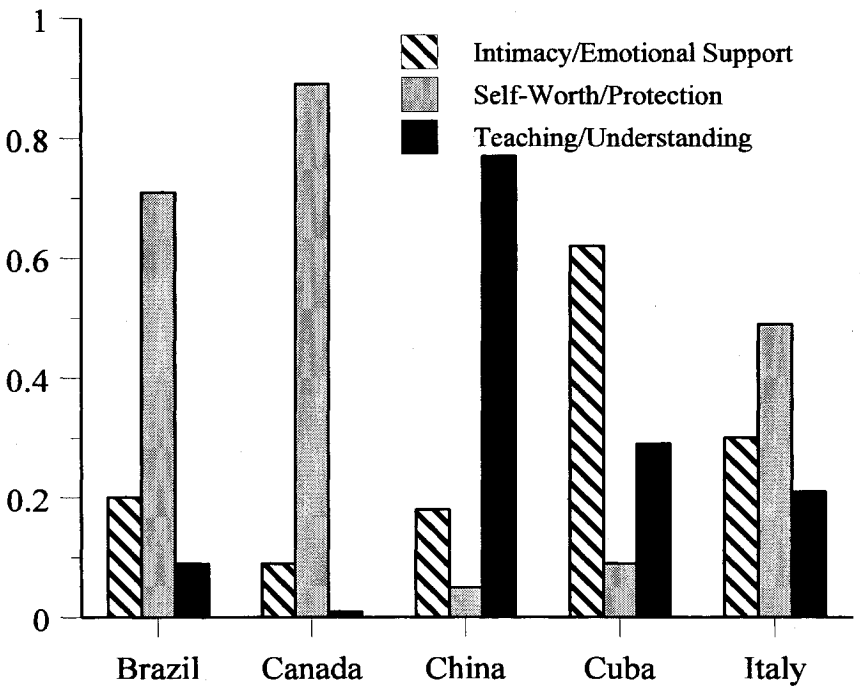
Through the latent class procedure, we found that the variable Country significantly contributed to the distinction among types of support (i.e., classes) for each relationship (for mother: $Wald = 180.43, p < .001$; for father: $Wald = 131.69, p < .001$; for best friend: $Wald = 66.16, p < .001$). This finding indicates that there were cultural differences in endorsement of the different types of support for each relationship. Figures 1, 2, and 3 display the proportion of children from each culture endorsing responses corresponding to each of the three response profiles identified in the preliminary analyses for each of the relationships with mothers, fathers, and best friends, respectively.

To evaluate further the significant association between culture and relationship provisions and identify the sources of the differences, we conducted a series of frequency analyses using frequencies obtained from the classification of respondents into the different classes (i.e., the different types of support) based on culture and gender groupings, for each relationship type separately. These results are presented in Table 6 and are further explained in the upcoming sections. The Bonferroni procedure was used to correct the level of significance for the number of analyses conducted. The results are organized in the next sections by the types of support generated from our preliminary analyses. For each type of support, within culture analyses are presented first for each relationship type, followed by between-culture analyses for each relationship type.



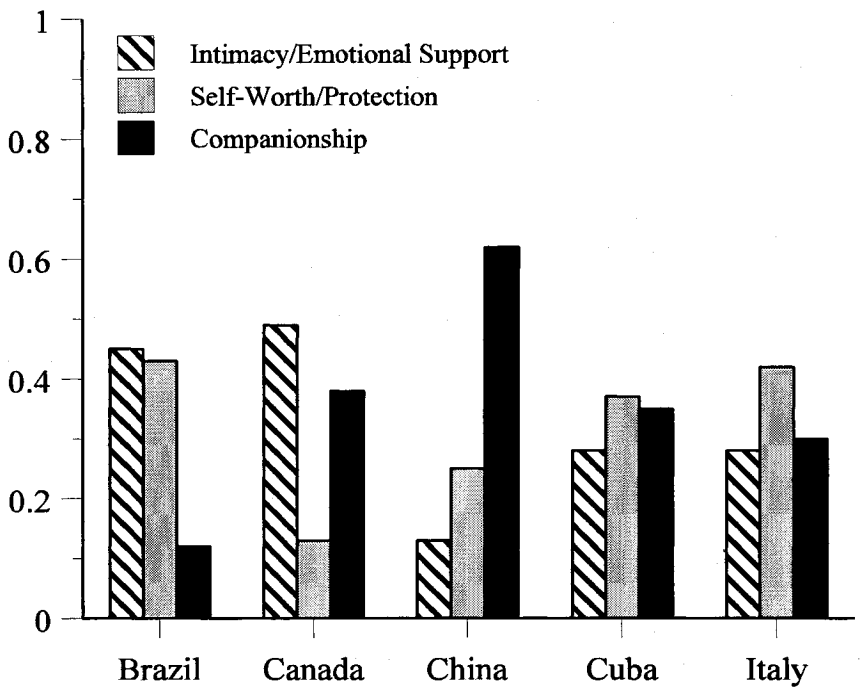
Note: *N*s = Brazil 400, Canada 116, China 268, Cuba 98, Italy 192.

Figure 1. Proportion of children in each sample describing their mothers according to each of the three response profiles



*Note: N*s = Brazil 389, Canada 110, China 262, Cuba 88, Italy 186.

Figure 2. Proportion of children in each sample describing their fathers according to each of the three response profiles



*Note: N*s = Brazil 401, Canada 116, China 271, Cuba 86, Italy 192.

Figure 3. Proportion of children within each sample describing their best friends according to each of the three response profiles

Table 6

Classification of Children's Response Profiles for Mothers, Fathers and Friends as a Function of Gender and Country

		Mothers			Fathers			Friends		
Gender	Country	Intimacy / Emotional Support	Enhancement of Self-Worth / Protection	Teaching / Assistance Understanding	Enhancement of Self-Worth / Protection	Teaching / Assistance / Understanding	Intimacy / Emotional Support	Protection / Enhancement of Self-Worth	Intimacy / Emotional Support	Companionship
		%	%	%	%	%	%	%	%	%
Boy	Brazil	45.2_a	45.5_a	9.4_b	55.7_a	11.3_b	33.0_c	56.7_a	27.4_b	15.9_c
	Canada	45.9_a	53.9_a	0.2_b	81.7_a	2.0_b	16.2_c	18.2_a	31.7_b	50.1_c
	China	23.6_a	4.5_b	71.9_c	2.4_a	69.2_b	28.4_c	28.1_a	5.3_b	66.5_c
	Cuba	85.0_a	3.1_b	11.9_b	2.9_a	18.6_b	78.5_c	46.0_a	13.0_b	41.0_a
	Italy	70.4_a	12.4_b	17.2_b	32.3_a	22.6_a	45.1_b	50.5_a	14.8_b	34.7_c
Girl	Brazil	26.7_a	63.3_b	10.0_c	85.8_a	7.3_b	6.8_b	29.1_a	61.9_b	9.0_c
	Canada	26.5_a	73.3_b	0.2_c	96.4_a	1.0_b	2.6_b	8.5_a	65.5_b	26.0_c
	China	14.3_a	6.5_a	79.2_b	6.7_a	82.4_b	10.9_a	22.5_a	18.8_a	58.8_b
	Cuba	74.6_a	6.4_b	18.9_c	13.6_a	36.7_b	49.7_c	31.0_a	38.6_a	30.5_a
	Italy	53.8_a	22.3_b	23.9_b	67.5_a	19.8_b	12.7_b	32.8_{ab}	42.3_b	24.9_a
χ^2 Gen. X Cult.		165.94**	312.71**	n.s.	474.17**	n.s.	352.96**	103.58**	187.08**	n.s.
Cross-Culture diff.		Cub>Ita>Bra, Can>Chi	Bra, Can>Ita, Chi, Cub	Chi>Bra, Ita>Cub>Can	Can>Bra>Ita>Chi, Cub	Chi>Cub, Ita>Bra, Can	Cub>Ita>Bra, Can, Chi	Bra, Ita, Cub>Can, Chi	Bra, Can>Cub, Ita>Chi	Chi>Can, Cub, Ita>Bra

Note[1]: Significant differences within cultures are indicated by different subscripts
Note[2]: $^{**}p<.01$; $^{*}p<.05$

Gender differences are noted whenever significant. It should be remembered from our preliminary analyses, that although some classes have similar names across relationship types, the structure of these differ across relationships. Additionally, some types of support were are present in some relationships and not others.

Intimacy/Emotional Support

Within-culture analyses. Within-culture analyses revealed that for relationships with mothers, intimacy/emotional support was selected to a significantly greater extent than other types of support by children from Cuba, $\chi^2 = 91.18, p < .01$ (pairwise, $p < .01$) and by children from Italy, $\chi^2 = 73.82, p < .01$ (pairwise, $p < .01$). In Cuba, nearly 80% of responses for mothers corresponded to the intimacy/emotional support profile. For Italy, the rate was 62% for mothers. For relationships with fathers, only Cuban children selected intimacy/emotional support to a greater extent than the other types of support, $\chi^2 = 37.79, p < .01$ (pairwise, $p < .01$), with more than half the sample selecting this type of support. For best friends, there was a higher endorsement of intimacy/emotional support relative to the other types of support among girls in Canada and among girls in Brazil (Table 6).

Between-culture analyses. There were significant cross-cultural differences in the frequency of responses corresponding to the intimacy/emotional support profiles for each relationship type: mothers, $\chi^2 = 164.63, p < .01$; fathers, $\chi^2 = 96.77, p < .01$; best friends, $\chi^2 = 91.8, p < .01$. Findings from the follow-up analyses are detailed in the last line of Table 6. These cultural differences were qualified by significant Country by Gender

interactions: mothers, $\chi^2 = 165.94$, $p < .01$; fathers, $\chi^2 = 352.96$, $p < .01$; friends, $\chi^2 = 187.08$, $p < .0$. The results of pairwise comparisons revealed that there was a significantly greater proportion of boys in Brazil who reported intimacy/emotional support in their relationships with their mothers than girls, $\chi^2 = 14.1$, $p < .01$, whereas there were no gender differences among the other cultures. For relationships with fathers, intimacy/emotional support was reported to a greater extent by boys than girls in Brazil, $\chi^2 = 39.98$, $p < .01$, China, $\chi^2 = 12.6$, $p < .01$, and Italy, $\chi^2 = 23.1$, $p < .01$, whereas there were no gender differences found in Cuba or Canada. In all cultures, with the exception of China, there were more girls than boys who perceived their best friends as providing intimacy/emotional support (all pairwise significant). In China, boys and girls perceived intimacy/emotional support in their best friends to the same extent.

Enhancement of Self-Worth/Protection

Within-culture analyses. Children in Canada and in Brazil endorsed enhancement of self-worth/protection for mothers and for fathers to a significantly greater extent than the other types of support: Canada, mothers, $\chi^2 = 68.66$, $p < .01$; fathers, $\chi^2 = 161.36$, $p < .01$; Brazil, mothers, $\chi^2 = 122.85$, $p < .01$; fathers, $\chi^2 = 256.44$, $p < .01$. The frequency of selection of enhancement of self-worth/protection in Brazil and Canada for mothers and fathers ranged from 55% to 89%. Enhancement of worth/protection was also endorsed to a greater extent than other types of support by Italian girls for fathers. For friends, there was a greater frequency of endorsement of self-worth/protection relative to the other types of support among Brazilian boys, Cuban boys, and Italian boys.

Between-culture analyses. A significant effect of culture was found for enhancement of worth/protection for mothers, $\chi^2 = 299.94, p < .01$; fathers, $\chi^2 = 403.9, p < .01$; and friends, $\chi^2 = 60.6, p < .01$. Findings from follow-up analyses of differences among the proportion of children from each country selecting enhancement of worth/protection can be found in Table 6, for each relationship. These differences are qualified by significant gender by culture interactions: mothers, $\chi^2 = 312.71, p < .01$; fathers, $\chi^2 = 474.17, p < .01$; friends, $\chi^2 = 103.58, p < .01$. For descriptions of mothers, a greater proportion of girls in Brazil had responses corresponding to the enhancement of self-worth/protection profile than boys, $\chi^2 = 13.5, p < .01$, whereas for the other countries, the proportion of girls and boys endorsing this type of support for mothers was the same. For relationships with fathers, there was a significantly greater frequency of endorsement of enhancement of self-worth/protection from girls than from boys in the Brazilian sample, $\chi^2 = 42.6, p < .01$, as well as in the Canadian sample, $\chi^2 = 22.02, p < .01$, whereas the endorsement rate of boys and girls did not differ in the other cultures. For friends, whereas significantly more boys than girls in Brazil, Cuba, and Italy perceived their friends as a source of enhancement of self-worth/protection, there were no gender differences in Canada and China.

Teaching/Assistance/Understanding

Within-culture analyses. For children in China, teaching/assistance/ understanding support was the most endorsed type of support relative to the other types of support for mothers, $\chi^2 = 227.36, p < .01$, and for fathers, $\chi^2 = 233.66, p < .01$ (all

pairwise $p < .01$). For children in Brazil and in Canada, teaching/assistance/ understanding had the lowest frequency of responses for mothers and fathers compared to the other types of support (pairwise $p < .01$). Approximately 30% of the Cuban sample reported teaching/assistance/understanding support for fathers (Figure 2).

Between-culture analyses. Frequency analyses revealed significant differences across cultures for perceptions of teaching/assistance/understanding support from mothers, $\chi^2 = 424.34, p < .01$ and from fathers, $\chi^2 = 478.76, p < .01$. Findings from the follow-up analyses are shown in Table 6 and revealed that Chinese children reported receiving teaching/assistance/understanding support from mothers and fathers to a significantly greater extent than children from each of the other cultures.

Companionship

Within-culture analyses. Companionship from friends was endorsed to a significantly greater extent than the other types of support for friends by children in the Chinese sample, $\chi^2 = 109.45, p < .01$, with close to 70% of Chinese respondents selecting this type of support (Figure 3). Companionship was also the most selected type of support perceived for friends among Canadian boys relative to the other types of support.

Between-culture analyses. There were significant cross-cultural differences in children's perceptions of companionship provided in their friendships, $\chi^2 = 91.8, p < .01$. Follow-up analyses indicated that Chinese respondents were significantly more likely than each of the groups to select responses that fit the companionship profile. Brazilian children were the least likely, and Canadian, Cuban, and Italian children had a likelihood

falling between Brazil and China and did not significantly differ from each other (Table 6).

Summary of Findings A summary of these findings in relation to the stated hypotheses is presented in Table 7.

Table 7

Summary of Findings in Relation to Stated Hypotheses

Hypothesis 1: Relation-Oriented Support	
China, Cuba > Brazil, Italy > Canada	
Findings:	
Intimacy/Emotional Support	
Mothers:	Cuba > Italy > Brazil, Canada > China (boys > girls: Brazil)
Fathers:	Cuba > Italy > Brazil, Canada, China (boys > girls: Brazil, China, Italy)
Friends:	Brazil, Canada > Cuba, Italy > China (girls > boys: Brazil, Canada, Cuba, Italy)
Teaching/Assistance/Understanding	
Mothers:	China > Brazil, Italy > Cuba > Canada
Fathers:	China > Cuba, Italy > Brazil, Canada
Companionship	
Friends:	China > Canada, Cuba, Italy > Brazil
Hypothesis 2: Self-Oriented Support	
Canada > Italy, Brazil > China, Cuba	
Findings:	
Enhancement of Self-Worth/Protection	
Mothers:	Brazil, Canada > Italy, China, Cuba (girls > boys: Brazil)
Fathers:	Canada > Brazil > Italy > China, Cuba (girls > boys: Brazil, Canada)
Friends:	Brazil, Italy, Cuba > Canada, China (boys > girls: Brazil, Cuba, Italy)

Note: Findings relating to gender differences (hypothesis 3) are included within the other findings.

Discussion

Much of our theorizing and hypothesizing about interpersonal relationships and social support has stemmed from a North American perspective. Several scholars have contended that such a focus constrains a full understanding of interpersonal functioning and that much can be gained from investigations involving samples from outside North America (e.g., Gudykunst & Ting-Toomey, 1988; Sampson, 1977; Schneider, 1993, 1998; Triandis, 1989). Studies of children's perceptions of their social networks which involved participants from cultures other than North America have provided valuable information on the possible influence of culture on the functional roles of children's close relationships (DeRosier, & Kupersmidt, 1991; French, D. C., Rianasari, M., Pidada, S., Nelwan, & Buhrmester, 2001). Unfortunately, such studies remain scarce. The present study involving a total of five cultures constitutes therefore a critical addition to this limited literature. Our main goal was to extend previous cross-cultural research on children's social support and achieve a better understanding of the role of cultural context on children's perceptions of their close relationships.

Through a Latent Class Analysis of a 24 item forced-choice measure of social provisions, we found that children's perceptions of their relationships could be classified according to three types of profiles based on item selections. For relationships with mothers and fathers, children's responses seemed to emphasize either intimacy and emotional support, enhancement of self-worth and protection, or teaching, assistance, and

understanding. Children's responses about their perceptions of their best friendships seemed to emphasize either intimacy and emotional support, enhancement of self-worth and protection, or companionship.

As expected, we found that culture was significantly associated with these distinctions in response patterns, suggesting that children's perceptions of their relationships may not be universal. These findings support the contention and the findings from previous studies (e.g., DeRosier & Kupersdmidt, 1991; French et al., 2001) that characteristics of social networks appear to be subject to cultural variations. In Tietjen's (1989) ecological view of support systems, the characteristics of social network members operate to promote children's competence. We predicted that children's perceptions of their relationships would reflect the value orientation and social organization of the cultures sampled. Our findings were generally consistent with our hypotheses but not in entirety.

Consistent with our first hypothesis, children from Cuba and China, the two most collectivistic cultures, emphasized relational features to a greater extent than features more focused on the self in their relationships and to a greater extent than children from the other cultures. However, whereas Cuban children tended to emphasize intimacy and emotional support in their relationships, particularly their relationships with their mothers and fathers, Chinese children tended to emphasize teaching, assistance, and understanding for parents and companionship for friends. Chinese children were the least likely among the cultural groups to perceive their relationships as providing intimacy and emotional

support. These different emphases may represent differences in forms of interconnectedness valued in each of these two cultures and hence the necessity for different competencies to develop. Although both cultures share a collectivistic value orientation, Chinese culture and Confucian values emphasize hierarchy, conformity and obedience toward those of authority (Hofstede, 1983; Schwartz, 1994; The Chinese Culture Connection, 1987). Intimacy and emotional types of support may be too egalitarian in this culture.

Chinese children have also been found to use face-saving communication with their family members and to feel uncomfortable discussing personal topics with their family members (Cooper et al., 1993). The high importance placed on education and mastery in Chinese culture may be a reason why children in the Chinese sample tended to perceive their mothers and fathers as teachers. In Chinese culture, "learning is a process and engagement not merely academic but imbued with social and moral implications" (Li, 2004, p. 126). Learning is important for a person to become a socially responsible and better person. Seeking such provisions in their relationships would help prepare these children for the cultural context in which they live and be in line with the values of the culture. In addition, child rearing in many Asian cultures places a continual emphasis on understanding and relating to others with the goal of maintaining harmonious relationships (Markus & Kitayama, 1994). Thus, it would be important for relationships to function in a way as to promote such competencies, which is what our results demonstrated.

In collectivistic Cuba, familism is a core value which includes strong feelings of loyalty, reciprocity, and solidarity among family members (Cooper et al., 1993; Rodriguez et al., 2003). This may explain our findings of much higher preference for intimacy-related characteristics relative to the other provisions. Cuban children spend a lot of time with extended family and with other children of their neighbourhoods. It may be of benefit to them to acquire skills that would enable them to function successfully in such an ecology, using Tietjen's term. In this environment, relationships may have developed to provide types of support that would allow children to experience closeness and an intimacy in their relationships. Chinese and Cuban children were also the least likely to select responses corresponding to the more self-oriented provision, particularly for mothers and fathers.

The responses of Canadian children were also generally consistent with the individualistic value orientation of the country, particularly in their perceptions of mothers and fathers. Canadian children's descriptions of these relationships were found to be oriented more toward the provision of support focused on the self (enhancement of worth, protection), with a greater proportion of children's responses corresponding to the enhancement of self-worth/protection profile than the more relation-oriented profiles of intimacy or teaching and assistance. Tietjen (1989) had argued that one element that seems to characterize individualistic cultures is the heavy emphasis on the right to privacy. Our findings of lower endorsement of intimacy in descriptions of parent relationships, particularly fathers, supports this contention and may be one reason why

Canadian children tended to have little preference for intimacy-related items. Moreover, the very low correspondence of Canadian children's responses with the teaching and assistance profile is also in line with the values in individualistic Canadian society to become independent and autonomous. Deriving such supports in their relationships would not be adaptive and would not prepare Canadian children to become competent individuals within their culture. Interestingly, Canadian children did not perceive their friends as providers of protection or of enhancement of worth and a high proportion of Canadian girls viewed their friends as providers of intimacy and emotional support.

Our hypotheses also stated that endorsement rates of Brazilian and Italian children would fall between those of the other cultures on all dimensions. Our findings were not always in line with expectations in part due to significant gender differences found among the responses of children from these cultures. Our results showed that Brazilian whereas girls perceived their mothers and fathers as providers of self-worth and protection, boys tended to view them as providers of intimacy and emotional support. Gender differences were also evident in Brazilian children's perceptions of their friends, with Brazilian boys perceiving their friends as enhancing their self-worth and providing protection and girls deriving intimacy and emotional support from their friends.

Similarly, in Italy, whereas boys were more likely to perceive their fathers as providing intimacy and emotional support, girls tended to perceiving them as enhancing their self-worth and providing protection. Thus, in line with the value orientation of these cultures, our findings point to a mixture of self and relation oriented types of support

supplied by relationships in Italy and Brazil. However, these vary according to gender. The greater tendency for Italian girls to perceive their father as serving more self-oriented functions may be due to authoritarian and paternalistic relations that remain in father-daughter relationships, rendering these relationships more emotionally distant. This interpretation is plausible, given the classification of Italy as a "masculine" culture (Hofstede, 1983). It could also be possible that in the light of changing roles for women in Italy in modern times, girls try to seek characteristics that tend to be more common in boys (i.e., more individualistic) to succeed in this changing world and which may be more easily derived from their relationship with their fathers. Similarly, the gender differences obtained in the Brazilian sample may reflect differences in the socialization of boys and girls and the influence of the machismo tradition. In addition, Brazilian children's responses seemed to be more similar to those of Canadian children than to those of Italian children, as had been expected. The predominance of a more self-oriented response profile in the Brazilian group may reflect a stronger individualistic orientation than we assumed. The gender differences also suggest possible changes in the social organization of the culture and perhaps an attempt to change the historical machismo tradition, with boys now expected to be more sensitive, intimately close and to provide more emotional support and women expected to be more autonomous and independent. Relationships may therefore have adapted to allow boys and girls to develop the appropriate competencies to be successful in their environment.

The findings from this study highlight the importance of understanding social

provisions from a cultural perspective. The concept of individualism-collectivism which has been widely considered the most fundamental dimension of cultural differentiation provides a starting point for integrating cultural variability with theories of provisions of relationship. However, as mentioned previously, there may be many more differences among cultures that may explain our findings. Our findings appeared to be more readily interpretable with this dimension for cultures that fall at the extremes of the individualism-collectivism dimension. For cultures that represent a mixture of values (e.g., Brazil and Italy) and that are undergoing rapid change, interpretation is more difficult. Moreover, the distinctions among cultures appeared more pronounced for descriptions of parents than those of friends.

For children's descriptions of their best friends, the differences both within and between the cultures were less pronounced and did not follow our hypothesized predictions. For example, Canadian children who we expected would tend to derive support that would contribute to their self-enhancement, preferred descriptors of their friendships relating to intimacy/emotional support and companionship. In China and Cuba, no significant preferences were found for types of support derived from children's friendships. DeRosier and Kupersmidt (1991) had also found fewer cultural differences in provisions of friendships than of family relations and Cooper, Baker, Polichar, and Welsh (1993) found that adolescent views of their family members did not always correlate with their views of their friends in a range of cultures. These findings might suggest that parent relations are the more predominant mode of cultural value

transmission and that the functions of these relationships would be where most of the development of the competencies needed for adaptation to cultural context would take place. As Krappman (1996) writes "friendships seem to be outside the usual sociological blueprint of a society in the sense that they emerge outside well-defined kinship systems and other institutions that are guardians of social norms and are likely to require conformity to rigid roles." (p. 21).

Our findings also provide support for the notion that children derive different types of support from their social networks and that multiple relationships must be examined to fully understand the provisions children derive from their relationships. The interactions we obtained between culture and gender also suggest important cultural influences on boys' and girls' perceptions of their relationships and suggest that to fully understand the socialization process, cultural expectations for gender roles must be considered.

Limitations of the Study and Directions for Future Research

This study has several limitations. First, as is often done in cross-cultural research, we attributed our findings to hypothesized or assumed differences among the cultures, particularly differences in value orientations. However, without direct measurement of cultural variations, it is difficult to determine the exact reasons for the cultural differences obtained. Hofstede (1980) used the term "ecological fallacy" to describe the assumption researchers often make that national values reflect individual value orientations. Without specifically assessing value orientation at the individual

level, we remain unsure as to whether all participants from each culture shared the culture's value orientation. Societies are labeled "individualistic" or "collectivistic" when these value orientations characterize the majority of individual members. Triandis (1989, 1994) and other authors (e.g., Hui, 1988; Wainryb, 1997) talk about the importance of subjective culture and how individuals within a culture may have somewhat different values. Thus, although there may be a cultural ideology that prevails within a society, individuals may more or less adopt this ideology or have a different subjective interpretation of it. One direction for future studies might be to administer a measure of individualism-collectivism at the individual level. This would also help define the value orientations of males and females to strengthen links between value orientation and relationship provisions.

Another limitation of our methodology involves our use of a single sample from each country. Our samples were drawn from "middle-class" segments of the population, according to the standards of the cultures. First, we do not know for sure, without a direct assessment of SES, that the samples were comparable on this parameter. Second, given the diversity within the cultures in the study, we do not know if our findings are generalizable to other segments of the population. Education level, SES, experiences in upbringing, may all be important within-culture factors that can affect the internalization of cultural values and affect social relationships. The findings of Triandis (1995) that increased affluence is associated with a change from a collectivist to an individualist orientation, and of studies with US populations that SES influences parent-child

interactions (Parke & Buriel, 1998) suggest that these parameters may influence findings. A wider sampling within cultures as well as in additional cultural contexts could improve our theoretical understanding of cultural influences on children's relationships.

Our study also succumbs to the challenges associated with an "etic" research approach to cross-cultural investigation. Scholars such as Berry (1989) and Poortinga (1989) describe the challenges and advantages of etic and emic approaches to cross-cultural research, with an etic approach referring to the comparative study of cultures from an external perspective and an emic approach referring to the intensive study of cultures from within. When using an etic approach, concepts, measures, and interpretations of data, are derived from the researcher's own culture and "imposed" on other cultures. From this perspective, there is an inherent difficulty in making sound comparisons across cultures. The interpretation of our findings from an emic viewpoint might yield a very different interpretation. Likewise, our conceptualization of social support as being comprised of specific dimensions or provisions was based on North American theories. It is plausible that an in-depth analysis of social support within specific cultures might yield provisions that do not figure in North American theories. It is therefore difficult to ascertain whether our findings represent a measurement artifact or valid differences. Further studies are needed to better understand indigenous conceptions of social support using a variety of methods such as field observations, key informants, qualitative assessments, and other ethnographic techniques, as Berry (1989) recommends. Unfortunately, finances, time constraints, access, and other logistical issues often render

such studies difficult to conduct.

In addition, our study focused on perceptions of support rather than on actual support. Previous research has shown that perceived and actual reception of support are not always highly correlated (Barrera, 1986). A future direction for research might be to explore other angles to the assessment of social provisions. Investigating provisions of support in children's relationships at different developmental stages could also be another direction for future research. Schneider (1993) raised the possibility that cultural differences may be more evident at certain ages or stages of development. Our findings may have differed had we used another age group. We also chose to investigate children's relationships with their mothers, fathers, and best friends. Future studies could include a wider network of relationships to shed more light on the impact of culture on the functions of children's relationships.

Finally, it should also be noted that the conversion of children's responses on our measure from a ranking of items to a dichotomy yielded a loss of information and likely affected our interpretation of the results. In children's original responses, not only were items selected, they were also ranked *"most true"*, *"second most true"*, *"third most true"*. By lumping these together in a "*selected/not selected*" dichotomy, we lost information about the extent to which the characteristics were descriptive of children's relationships. A different data analytic strategy may have produced different results.

Summary and Implications

This study is one of the few emerging studies on children's perception of the

provisions of support in their relationships from a cross-cultural perspective. Our findings revealed important cultural differences in perceptions of support provisions from relationships with mothers, fathers, and best friends among cultures varying along several characteristics including individualistic and collectivistic value orientations. The study provided evidence of distinct types of support perceived by children in their different relationships, as Weiss's (1974) theory of support provisions would suggest. However, the study also revealed that these perceptions were affected by the cultural background of children suggesting that network characteristics are not universal among all children. Gender and its interaction with culture also influenced perceptions of support. These findings have important implications. From a theoretical perspective, the results of this study suggest that theories of social support as well as gender theories are subject to cultural variation and therefore need to be expanded to include cultural context. A more complete understanding of children's social relationships would be achieved by further examining differences between cultures and as well as between genders. The culture and gender interactions that emerged in this study also have implications for cross-cultural theories. These findings suggest that cross-cultural theories also need to be expanded to include the role of gender to account for the different contexts in which males and females live within cultures. From an applied standpoint, the study reinforces the notion of social context as an important variable in understanding social behaviour and perceptions. The findings suggest that caution should be taken in interpreting behaviour in the absence of cultural context and in assuming generalizability of interventions to

diverse populations. The types of support identified in this study as being important to the different cultural groups sampled provide possible avenues for intervention strategies to promote the development of types of support that might be most beneficial to different groups.

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Appendix A
Children's Social Networks

Name _____ Boy or Girl

Everyone has a number of people who are important in their life. For example, your parents and friends are people who might be important to you. In this questionnaire, we ask about your relationships with these people.

1. You are currently living with: Mother ___ Father ___ Step Mother ___ Step Father ___ Grandmother ___ Grandfather ___ Aunt ___ Uncle ___ Cousins ___

2. Write down the names of your siblings from oldest to youngest.

Sibling 1 _____ boy or girl Age ___
Sibling 2 _____ boy or girl Age ___
Sibling 3 _____ boy or girl Age ___
Sibling 4 _____ boy or girl Age ___
Sibling 5 _____ boy or girl Age ___
Sibling 6 _____ boy or girl Age ___

3. What is your mother's job: _____
What is your father's job: _____

4. Please write the initials of your best friend. This friend should NOT be your boy/girl friend if you have one.

a. Initials _____ b. This person is a: boy girl
c. How long have you been friends? Less than 6 months ____
6 months to 1 year ____ 1 year to 3 years ____ more than 3 years _____

The following questions ask about your relationships with each of the following people: 1) your mother or step mother; 2) your father or step-father; 3) your best friend. If you don't have a friend or any other person listed below, leave the space blank.

A.

1. This person helps me figure out or fix things.
2. This person really understands me.
3. I feel more comfortable when this person is with me in a new place.
4. This person makes me feel important and special.
5. I often play around and have fun with this person.
6. When I feel really good about something that happened to me, I tell this person about it.

Read the above questions TWICE. Next, from the 6 sentences listed above, select the one which is most true of your relationship with your mother. Put the number of this most true sentence on the first line below. Now, select a sentence that is the second most true for your mother, and put the number of the sentence on the second line below. Finally, select a sentence that is the third most true for your mother and put the number of the sentence on the third line below. If you really can't find any sentence that is most true, or second most true, or third most true for your mother, just leave the space blank.

1. **Mother**	Most true	Second most true	Third most true
	_____	_____	_____

Now, read the above 6 sentences again and do the same for your relationship with your father.

2. **Father**	Most true	Second most true	Third most true
	_____	_____	_____

Please do the same for your relationship with your friend.

3. **Friend**	Most true	Second most true	Third most true
	_____	_____	_____

B.

1. I often stay with this person in my free time.
2. I tell this person everything.
3. I can count on this person when I need help with something.
4. When I'm angry or upset about something, this person tries to be understanding.
5. This person is able to comfort me when I am frightened.
6. This person tells me I'm good at things.

Now, you need to do the same with these 6 sentences. But first read them TWICE. Then, select the sentences that are most true, second most true and third most true for each of your relationships and put the number of the sentences on the lines below. If you really can't find any sentence that is most true, or second most true, or third most true for any of the relationships, just leave the space blank.

1. **Mother**	Most true	Second most true	Third most true
	_____	_____	_____

2. **Father**	Most true	Second most true	Third most true
	_____	_____	_____

3. **Friend**	Most true	Second most true	Third most true
	_____	_____	_____

C.

1. I share my secrets and private feelings with this person.
2. When I want to do something for fun, I can usually find this person.
3. This person treats me like I am important.
4. This person teaches me how to do things I don't know.
5. This person understands and cares about my feelings.
6. This person can protect me when I am in trouble.

Now, please do the same with these 6 sentences. But first read them TWICE. Then, select the sentences that are most true, second most true and third most true for each of your relationships below.

1. **Mother**	Most true	Second most true	Third most true
	_____	_____	_____
2. **Father**	Most true	Second most true	Third most true
	_____	_____	_____
3. **Friend**	Most true	Second most true	Third most true
	_____	_____	_____

D.

1. This person makes me feel good about myself.
2. I often go places and do enjoyable things with this person.
3. I would like to be with this person when I feel scared or uncomfortable in a new place.
4. I talk with this person about the things that make me sad or mad.
5. If something bothers me, this person knows about it.
6. This person helps me when I need to get something done.

Now, do the same with these 6 sentences. But first read them TWICE. Then, select the sentences that are most true, second most true and third most true for each of your relationships below.

1. **Mother**	Most true	Second most true	Third most true
	_____	_____	_____
2. **Father**	Most true	Second most true	Third most true
	_____	_____	_____
3. **Friend**	Most true	Second most true	Third most true
	_____	_____	_____

Appendix B: Response Profiles for the Four Latent Classes of Children's Descriptions of their Friends

Item	Class 1	2	3	4	R^2
Class size	.33	.29	.26	.11	
1. This person helps me figure out or fix things.	.45	.47	.33	.60	.03
2. This person really understands me.	.33	.40	.56	.75	.08
3. I feel more comfortable when this person is with me in a new place.	.23	.45	.32	.56	.06
4. This person makes me feel important and special.	.19	.37	.28	.29	.03
5. I often play around and have fun with this person	.89	.59	.72	.31	.15
6. When I feel really good about something that happened to me, I tell this person about it.	.63	.45	.68	.27	.07
7. I often stay with this person in my free time.	.78	.52	.52	.84	.08
8. I tell this person everything.	.38	.33	.92	.86	.29
9. I can count on this person when I need help with something.	.51	.46	.55	.63	.01
10. When I'm angry or upset about something, this person tries to be understanding.	.35	.50	.43	.10	.06
11. This person is able to comfort me when I am frightened.	.24	.43	.20	.15	.06
12. This person tells me I'm good at things.	.38	.50	.27	.22	.04
13. I share my secrets and private feelings with this person.	.58	.38	.97	.85	.24
14. When I want to do something for fun, I can usually find this person.	.93	.55	.78	.71	.13
15. This person treats me like I am important.	.47	.40	.26	.55	.04
16. This person teaches me how to do things that I don't know.	.21	.48	.22	.18	.07
17. This person understands and cares about my feelings.	.25	.43	.55	.09	.10
18. This person can protect me when I am in trouble	.16	.48	.12	.31	.12
19. This person makes me feel good about myself	.40	.42	.57	.71	.04
20. I often go places and do enjoyable things with this person.	.80	.37	.60	.79	.14
21. I would like to be with this person when I feel scared or uncomfortable in a new place.	.18	.39	.27	.64	.09
22. I talk with this person about the things that make me sad or mad.	.42	.47	.66	.35	.05
23. If something bothers me, this person knows about it.	.27	.51	.46	.07	.09
24. This person helps me when I need to get something done.	.51	.54	.33	.16	.07