INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®
A CROSS-CULTURAL STUDY OF THE DIMENSIONS OF FRIENDSHIP QUALITY

by

Mary Hum

A thesis submitted in conformity with the requirements for the degree of Master of Arts
Department of Human Development and Applied Psychology
Ontario Institute for Studies in Education of the University of Toronto

© Copyright by Mary Hum (1999)
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L’auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L’auteur conserve la propriété du droit d’auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-45389-8
Abstract

A Cross-Cultural Study of the Dimensions of Friendship Quality

Master of Arts 1999

Mary Hum

Department of Human Development and Applied Psychology

Ontario Institute for Studies in Education of the University of Toronto

The purpose of this study was to examine the dimensions of friendship quality comparing Taiwanese and Canadian children using the Friendship Qualities Scale (Bukowski, Hoza, & Boivin, 1994). The participants were Grade 3 and Grade 4 students from middle-class suburbs of Toronto, Canada, and Taipei, Taiwan. Results showed the Taiwanese data to replicate the five-factor model reported by Bukowski and his colleagues (1994). In contrast, a two-factor solution was found to be the best fit for the Canadian participants. Independent sample t-tests of friendship quality ratings by country and gender demonstrated that Canadian children reported their friendships as more positive and more conflictual. There were no significant differences in positive ratings between boys and girls in either Taiwan and Canada. Taiwanese boys reported significantly higher ratings of conflict than girls, whereas no significant difference for conflict was reported between Canadian boys and girls.
**Acknowledgements**

I would like to extend my deepest appreciation to my supervisor Barry Schneider for his role in this thesis. I will never forget his patience, support, and assistance throughout the entire project.

I would also like to thank Jane Benjamin. Without her, the Taiwanese data would not have been collected and this thesis would not have been written.

My family, friends, and my sweet other half deserve special rewards for their stamina and endurance. Only they, with infinite patience, could have tolerated the word “thesis” in every other sentence for the last two years. I am positive that they will never want to hear that word again. Thank you all for being such a wonderful support system during the best and worst times.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iv</td>
</tr>
<tr>
<td>List of Tables</td>
<td>vi</td>
</tr>
<tr>
<td>List of Appendices</td>
<td>vii</td>
</tr>
<tr>
<td>Chapter 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Importance of Children’s Friendships</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Friendship Quality</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Cross-Cultural Research on Children’s Friendships</td>
<td>7</td>
</tr>
<tr>
<td>1.4 The Taiwanese Culture</td>
<td>8</td>
</tr>
<tr>
<td>1.5 Socialization Practices: Individualistic Versus</td>
<td>11</td>
</tr>
<tr>
<td>Collectivistic Cultures</td>
<td></td>
</tr>
<tr>
<td>1.6 Comparing the Friendship Quality of Taiwanese and Canadian Children</td>
<td>15</td>
</tr>
<tr>
<td>1.7 Gender Differences in Children’s Friendships</td>
<td>16</td>
</tr>
<tr>
<td>Chapter 2: METHOD</td>
<td>19</td>
</tr>
<tr>
<td>2.1 Participants</td>
<td>19</td>
</tr>
<tr>
<td>2.2 Procedures</td>
<td>19</td>
</tr>
</tbody>
</table>
## Table of Contents (continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 Measures</td>
<td>20</td>
</tr>
<tr>
<td>Chapter 3: RESULTS</td>
<td>22</td>
</tr>
<tr>
<td>3.1 Factor Structure Analyses</td>
<td>22</td>
</tr>
<tr>
<td>3.2 Friendship Quality Ratings</td>
<td>23</td>
</tr>
<tr>
<td>Chapter 4: DISCUSSION</td>
<td>26</td>
</tr>
<tr>
<td>4.1 Friendship Dimensions</td>
<td>26</td>
</tr>
<tr>
<td>4.2 Positive and Conflict Ratings of Friendship Quality</td>
<td>26</td>
</tr>
<tr>
<td>4.3 Gender Differences</td>
<td>28</td>
</tr>
<tr>
<td>4.4 Limitations and Future Directions</td>
<td>29</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>31</td>
</tr>
<tr>
<td>TABLE</td>
<td>38</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>39</td>
</tr>
</tbody>
</table>
List of Tables

Table 1: Descriptive statistics (dyad means) for ratings of friendship quality by country and gender................................. 38
# List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Friendship Nomination Procedure</td>
<td>39</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Friendship Qualities Scale</td>
<td>40</td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

Research has steadily demonstrated the friendship experience makes an important contribution to children’s development (e.g., Asher & Gottman, 1981; Bukowski, Newcomb, & Hartup; 1996; Schneider, Wiener, & Murphy, 1994). It is important to highlight, however, that much of what is known about children’s friendships is based on North American data (e.g., Krappmann, 1996). The purpose of this study is to examine the dimensions of friendship quality in ratings by Taiwanese children, using Canadian children as a comparison group.

1.1 IMPORTANCE OF CHILDREN’S FRIENDSHIPS

The peer group provides unique learning opportunities that are unobtainable elsewhere. Interpersonal interaction within the peer group provides an influential force in children’s social, emotional, and cognitive development (e.g., Asher & Coie, 1990; Bukowski et al., 1996; Rubin & Ross, 1982). Children who are unaccepted by their peers are at risk for dropping out of school, engaging in criminal activities, and developing psychiatric disturbances (Parker & Asher, 1987). These children are lonely (Asher & Wheeler, 1985) and often cannot escape from their negative status (Coie & Dodge, 1983).

Children’s peer relationships consist of many forms (Berndt & Ladd, 1989). In understanding the different processes and experiences that exist in peer
relations, an important distinction is made between popularity and friendship. Popularity refers to “being liked or accepted by the members of one’s peer group” (Bukowski & Hoza, 1989, p. 19) whereas friendship “is the experience of having a close, mutual, dyadic relation” (Bukowski & Hoza, 1989, p. 19). Thus, popularity is a unilateral construct that is general and group-oriented. In contrast, friendship is a dyadic experience that is specific and occurs between two individuals (Bukowski & Hoza, 1989). Berndt and Ladd (1989) suggested that different opportunities for learning and development (e.g., close companionship versus group belongingness) are offered in the dyadic and group relationships.

In the last decade and a half, friendship research has garnered much attention. This was partially due to increasing awareness and acceptance of human adjustment theorists such as Sullivan (1953), who asserted that “chumships” (i.e., friendships) were important for psychological adjustment, especially self-esteem, during adolescence. Furthermore, it has been suggested that considering only peer group status might lead to an underestimate of children’s interpersonal skills. Specifically, research has shown that it is possible for popular children to not have any close friends and for socially rejected children to have at least one close friend (e.g., Asher & Parker, 1989). In comparison to children without mutual friends, having at least one mutual friend appears to be related to higher self-worth and less loneliness (Asher & Parker, 1989). Therefore, the opportunity for children to
engage in a close, reciprocal relationship involving trust and intimacy is an experience that is clearly distinct from the opportunities offered by relations with associates across the larger peer group.

1.2 FRIENDSHIP QUALITY

Researchers have made systematic attempts to identify the dimensions of friendship quality. Identifying the dimensions of friendship quality is important in providing a framework for understanding how children's friendships function and what factors may contribute to their continuation or stability. Although there does not appear to be consistency in the number of dimensions of friendship quality reported across researchers, Parker and Asher (1993) note that there is a general consensus as to the features that are important to consider. Representative studies using multi-dimensional evaluations of friendship features are briefly discussed below.

Furman and Buhrmeister (1985) developed the Network of Relationships Inventory (NRI) to assess six social provisions (reliable alliance, enhancement of worth, instrumental help (guidance), companionship (social integration), affection, and intimacy (disclosure)) and other characteristics of children's relationships (relative power of the child and other, conflict, satisfaction with the relationships, and importance of the relationship). Children were asked to rate how characteristic each item was of their relationships with fathers, mothers, siblings,
grandparents, teachers, and friends. For each relationship, three dimensions were consistently revealed: warmth/closeness, conflict, and exclusivity.

Furman and Buhrmeister's (1985) three-factor solution was distinct from the solutions reported in other studies. For example, Parker and Asher (1993) using their Friendship Quality Questionnaire (FQQ) data on Grade 3 and Grade 5 American students from a mid-sized, Midwestern community, performed a principal-components analysis (oblique rotation) of the 40 items in the FQQ and found six factors with eigenvalues greater than 1.0. The six factors were Intimate Exchange, Conflict Resolution, Companionship and Recreation, Help and Guidance, Validation and Caring, and Conflict and Betrayal. The six factors were reported to be moderately and highly intercorrelated (rs ranged from .16 to .75). The first five factors were positively intercorrelated with the last factor, Conflict and Betrayal, being negatively correlated to the others.

In another study using the Friendship Qualities Scale (FQS), Bukowski, Hoza, and Boivin (1994) reported a five-factor model that consisted of friendship dimensions similar to the ones reported by Parker and Asher (1993). Bukowski and his colleagues developed the FQS using Grade 5 to 7 students from a northern New England area of the USA. A confirmatory factor analysis of their scale revealed five dimensions (companionship, conflict, help/aid, security, and
closeness) of friendship. Bukowski and his colleagues reported internal consistencies ranging from alphas .71 to .86 (Cronbach coefficients).

However, a factor solution dissimilar to the five-factor model was reported by Schneider and his colleagues. In a cross-cultural design with Italy and Canada, Schneider, Fonzi, Tani, and Tomada (1997) studied the friendship stability of Grade 3 and 4 children by using Bukowski et al.’s (1994) Friendship Qualities Scale. A two-factor structure for both countries was found to be the most appropriate for their statistical analyses. When the two-factor structure was tested on the Italian sample alone, it was found to be a similar fit to the five-factor model conceptualized by Bukowski et al. The two-factor model reported by Schneider and his colleagues consisted of combining the Help, Closeness, Security, and Companionship factors into one Global Positive Factor (because of the high intercorrelations among the four subscales as reported by Bukowski et al.) and Conflict as the second factor.

Interestingly, Schneider and his colleagues’ (Schneider, Fonzi, et al., 1997) report of a two-factor solution consisting of a positive and a negative dimension was similar to a structure reported by Berndt and Keefe (1995) in an earlier study using a series of questions adapted from a previous interview instrument (Berndt & Perry, 1986). Berndt and Keefe assessed three positive features (intimate self-disclosure, prosocial behavior, and self-esteem support) and two negative features
(conflict and rivalry) of friendship on a five-point scale ranging from never to very often or every day. Their sample consisted of Grade 7 and Grade 8 students from three public schools in the USA. The students’ ratings of their very best friendships were averaged and mean scores calculated for the five features. A principal-components analysis of the five mean scores resulted in two factors with eigenvalues greater than 1.0. Berndt and Keefe reported the first factor to account for 51% of the variance with a VARIMAX rotation showing high loadings ranging from .87 to .91 for intimate self-disclosure, prosocial behavior, and self-esteem support. The internal consistency was reported to be an alpha of .92. The second factor accounted for 29% of the variance with high loadings (.88 to .90) for conflicts and rivalry after VARIMAX rotation. The internal consistency of the negative items making up these features was alpha .80.

In summary, it appears that, although the studies yielded variant factor structures for the dimensions of friendship quality, there was a commonality woven among them. Specifically, each study reported the existence of both positive features and negative features of friendships. The different dimensions of friendship quality and the different factor structures found in each study may possibly be explained by the age of the participants and their cultural contexts. For instance, in comparing Bukowski et al.’s (1994) and Schneider, Fonzi, et al.’s (1997) studies, the factor structure of the FQS appeared to be culturally sensitive.
Schneider and his colleagues demonstrated that a two-factor solution was the most parsimonious for their Italian sample rather than the five-factor model originally reported. Subsequently, it is possible that the application of the FQS to another cultural population may also yield a factor structure different from that of Bukowski and his colleagues. Therefore, one purpose of this study is to examine the factor structure of the FQS on a Taiwanese population group.

1.3 CROSS-CULTURAL RESEARCH ON CHILDREN'S FRIENDSHIPS

Cross-cultural research on children’s friendship is in its infancy. Currently, little information exists on the cultural differences of children’s friendships (Krapmann, 1996). It is argued that cross-cultural research can provide important contributions to our understanding of the friendship relationship. Answers may be gleaned as to whether certain friendship features and characteristics are specific to a certain culture or if they are globally observed. Cross-cultural friendship research can provide opportunities to explore new aspects that have not been rigorously examined. For example, Schneider (1993) suggested there may be potential cultural differences because 1) different cultures have differing expectations for their friends; 2) different school schedules restrict or facilitate friendship contacts; and 3) cultures differ in terms of the relative functions of friendships and extended families. Cross-cultural research, then, can
extend the research literature by providing fresh insights as to the nature of children’s friendship relations in distinct societies.

Anthropological studies have demonstrated that friendships exist within a larger cultural context and that sociocultural factors play a significant role on their “content” and “performance” (Krappmann, 1996). The interactions within a culture appears to shape the developmental progress of friendships (Krappmann, 1996). Indeed, much of the dynamics in friendships reflect a culture’s social, economic, and spiritual characteristics (Schneider, Smith, Poisson, & Kwan, 1997). As a result, many of the cross-cultural differences found in interpersonal relationships may be a function of different economic and political ideologies (Schneider, 1993). This study provides an important step forward by examining the possible influences of different socio-political climates and socialization practices on children’s friendships. This will be achieved by comparing Taiwanese and Canadian children on the dimensions of friendship quality.

1.4 THE TAIWANESE CULTURE

Chinese culture has experienced extensive changes in past decades affecting the livelihood of its people (Chu & Hsu, 1984). Socio-political changes resulted in millions of people having to adapt to new ways of life within a short span of time (Chu & Hsu, 1984). In the past four decades, Taiwan, the People’s Republic of China, and Hong Kong have moved in different directions and in
essence, have created their own separate worlds (Szalay, Strohl, Fu, & Lao, 1994). Because of the differing economical and political structures existing in these three cities, it is important to study them independent of one another.

Of particular interest to this study is Taiwan, a small island located off the coast of southern China. Taiwan's geographical and political situation has resulted in a vulnerability to influences from within the island (Lin & Tsai, 1996) and a greater openness to Western influences in comparison to the People's Republic of China and Hong Kong (Szalay et al., 1994). This vulnerability has resulted in Taiwan marrying both traditional and Western influences in its response to socio-political changes that have occurred over the last four decades. Taiwan, therefore, provides a unique context for examining the influence of socio-political changes on the socialization practices of its children.

Taiwan experienced rapid social and economic development following World War II (Coombs & Sun, 1981). Subsequent decades brought upon accelerated changes as evidenced by increases in industrial and agricultural production and per capita real income. Taiwan witnessed sharp increases in education levels and a widening of communication and transportation networks (Coombs & Sun, 1981). Urban life became increasingly popular as people moved from agricultural to non-agricultural employment (Coombs & Sun, 1981; Olsen, 1974).
Taiwan's industrialization and urbanization have resulted in corresponding changes in family patterns and socialization practices of the young, especially among the educated elite (Olsen, 1974). More women are working (Lee & Sun, 1995; Lin & Tsai, 1996) and there has been a strong shift away from the traditional extended family. Nuclear families have become increasingly commonplace (Lee & Sun, 1995) with 56% of Taiwanese adults in one study reporting to have grown up in one (Berndt, Cheung, Lau, Hau, & Lew, 1993).

Although Taiwan has increasingly been influenced by Western culture, it upholds traditional values from its strong collectivistic roots (Lee & Sun, 1995). Traditionally, Confucianism dictated social life in Chinese societies and was the dominant value system for thousands of years (Lin & Tsai, 1996; Lu & Shih, 1997). Emphasized in Confucianism were group interest, morality, and interpersonal relationships (Lin & Tsai, 1996). Confucian principles permeated all aspects of society and were applied faithfully to the socialization of its children.

Similar socialization processes occur in present day Taiwan (Ho, 1989) and Confucianism remains the national ethic on the island (Yang, 1988).

Confucius' teachings emphasize "virtues of filial piety, respect for elders, mutual dependence, group identification (collectivity), moderation and harmony, and self-discipline (Chiu, 1987, p.410)". These philosophies are imparted to children both by the family and the school in mutual reinforcement (Wilson, 1970;
Because a collectivistic culture such as Taiwan has emphasized historically and applied extensively its philosophical teachings to the socialization of its children, it is important to examine the influence of these teachings in order to better understand its variance from the socialization practices of individualistic cultures typically found in the West.

1.5 SOCIALIZATION PRACTICES: INDIVIDUALISTIC VERSUS COLLECTIVISTIC CULTURES

The different socialization practices evident in Canada and Taiwan may affect the quality of children’s friendships. Because the majority of the comparative studies reviewed in this paper used American participants, parallelisms between English Canada and United States are made here.

English Canada is reported to be similar to the United States in its individualistic orientation. Baer, Grabb, and Johnston (1993) suggested English Canada and the United States to share a common set of political and social attitudes. The same language is used in both countries and they are both exposed to the same, mainly American, mass media and popular culture (Baer et al., 1993). Although Lipset (1986) reported English Canadians to be less individualistic, more family-oriented, and more conservative than US respondents, subsequent studies did not find significant differences between the two countries (Baer et al., 1993). Thus, similar attitudes and values may exist between English Canada and the
United States (Baer et al., 1993) with socialization efforts focusing on individual autonomy and self-promotion (Schwartz & Ros, 1995).

In contrast, Taiwan is a collective society with traditional values that differ from ones found in individualistic cultures. Subsequently, child-rearing and socialization practices of its young differ. For example, Taiwanese parents are particularly attentive to educating their children (Szalay et al., 1994). When compared to American parents, they described themselves as being more controlling (Lin & Fu, 1990). Hsu (1981) considered American parents to be more liberal and permissive when socializing their children than Chinese parents. Chiu’s (1987) study comparing the child-rearing attitudes of Chinese, Chinese-American, and Anglo-American mothers substantiated the findings of these researchers. Chiu noted that Chinese mothers were restrictive and controlling in their intention to protect rather than to inhibit their children. This greater restriction and control on the part of Taiwanese mothers, the primary socialization agents for their children (Wilson, 1981), may be due to their deference to Confucian philosophies. Further discussion of group interest, moral development, and harmony in social relations are warranted, because they have special relevance to friendship quality.

In accordance with Confucian principles, Taiwanese children are taught early to conform to group expectations, goals, and objectives. Conformity to
group behavior is rewarded while dissension is punished (Wilson, 1970; 1981). When deviance from group norms occurs, "face" is compromised and tension is experienced by the individual (Wilson, 1970). At school, activities are structured to reinforce the group as the administrator of approval or rejection of behavior (Wilson, 1970). Thus, conformity to the group is a salient characteristic of social interaction in Chinese children (Lin & Tsai, 1996; Wilson, 1981). The needs and interests of the group are given importance over those of the individual (Lin & Tsai, 1996: Stigler, Smith, & Mao, 1985).

In contrast to Taiwan's collectivistic society, conformity for the common good of the group is not emphasized in Canada. From the onset, children are socialized towards individualism and fostered to be independent. Wilson (1981) suggested that while seeking approval within the peer group is common in both Chinese and American children, American children remain semi-autonomous within the social setting unlike Chinese children. The individualistic Western culture emphasizes individual success, control, and achievement (Lu & Shih, 1997).

In Chinese socialization, there is a large focus on moral development (Wilson, 1981). In Confucius' philosophical teachings, morality was considered to be an essential quality in mankind (Lin & Tsai, 1996). Subsequently, moral training is an important aspect of the learning milieu in Taiwan's school system.
Learning of moral rules is much more emphasized in Chinese socialization processes than in the US (Wilson, 1981). The importance of moral education is reinforced at school, during extracurricular activities, and at home in Taiwan (Lin & Tsai, 1996; Wilson, 1981; Yuan & Shen, 1998). In Canada, no evidence for the extensive training and application of moral rules similar to Taiwan’s was found in the literature.

Literature on harmonious relations training in Canada was also not found. This is in stark contrast to the Chinese. A core of Chinese traditional values is harmony in social relations (Fang, 1988) that is a concept central to Chinese thought (Wu, 1976). Harmony among people is an important concern and one that the Chinese strive to maintain (Hsu, 1963). Chinese means of enhancing harmony in social relations are through self-effacement (Bond, Leung, & Wan, 1982) and humility (Bond et al., 1982). It is interesting to note that although social harmony is generally espoused in the Chinese population, differences within the culture may still be observed. For example, Yuan and Shen (1998) compared the moral values held by Grade 7 students in Mainland China and Taiwan using two surveys. They reported Taiwanese adolescents to be more people-oriented and to place greater value on interpersonal relationships. In contrast, Mainland China adolescents preferred values relating to competence and personal effectiveness. Yuan and Shen noted that the Taiwanese participants “have
maintained more traditional values concerning interpersonal relationships and social harmony” (p.199).

It thus appears that Taiwan’s collectivistic society is committed to imparting Confucian principles in the socialization of its young. This education is mutually reinforced at home and at school. From an early age, Taiwanese children are taught appropriate social mannerisms for maintaining harmonious relations and are expected to practice what is learned. In Canada’s individualistic society, philosophical teachings are not extensively and intensely applied to the socialization practices of children. Thus, the distinct socialization processes of the two societies may result in different peer interactions and dimensions of friendship quality.

1.6 COMPARING THE FRIENDSHIP QUALITY OF TAIWANESE AND CANADIAN CHILDREN

The importance of character development and training is much more stressed in Taiwan than in the Western culture (Szalay et al., 1994). Taiwan’s socialization of its children to behave harmoniously in social contexts and the cooperative teaching environment between the home and the school may result in children experiencing more competent social interactions with their peers. In comparison to Canadian children it appears that Taiwanese children are actively taught and reinforced to engage in positive social relationships. Consequently, it is
hypothesized that Taiwanese children will report higher ratings of friendship quality compared to their Canadian counterparts.

1.7 GENDER DIFFERENCES IN CHILDREN'S FRIENDSHIPS

Schneider, Fonzi, et al. (1997) discussed the possibility of gender differences being accentuated in friendships of different cultures. In the United States, for example, Berndt (1986) reported girls' friendships to be more intimate than boys', although more similarities than differences were evident. Differences in the North American culture may be partially accounted to the strong masculine and feminine role socialization practices introduced early in life. Schneider and his colleagues also found gender differences favouring girls. In their study, both Canadian and Italian girls perceived more positive attributes in their friendships than their male counterparts. Interestingly, no gender differences were found for the conflict factor in both countries.

It is possible that gender comparisons of children's friendships in other cultures may evince findings similar to Berndt's (1986) and Schneider, Fonzi, et al.'s (1997) studies. In Yuan and Shen's (1998) study of moral values, it was reported that the girls from both Mainland China and Taiwan demonstrated more concern for relationships than the boys. It is, therefore, hypothesized that gender differences in the dimensions of friendship quality will be observed not only for the Canadian subjects, but also with the Taiwanese subjects in this study.
In summary, the purpose of this study is to examine the dimensions of friendship quality among Taiwanese and Canadian children. The following hypotheses are made: 1) Taiwanese children will report higher ratings of friendship quality in comparison to Canadian children; 2) Canadian and Taiwanese girls will report more positive attributes of their friendship relationships than their male counterparts. No gender differences will be found for conflict in either country. The latter statement is derived from the findings in Schneider et al.’s (1997) study for the Canadian subjects and from the Taiwanese literature indicating the prominence of social harmony in interpersonal relations in their culture. 3) A factor analysis of the FQS for Taiwanese children will yield a factor structure different from the five-factor model reported by Bukowski et al. (1994). Specifically, it is likely that the Help, Closeness, Security, and Companionship factors will be combined into one positive factor. This may occur due to the high intercorrelations among the four positive subscales and due to Taiwan’s emphasis on loyalty, benevolence, trustworthiness, righteousness, harmony and peace as ideal ways to treat others in social relations (Lin & Tsai, 1996). Consequently, much overlap between the positive items will be expected from the Taiwanese reports on the FQS. The conflict factor will remain separate from the other four. Interpersonal confrontations and aggression are not expected to be a significant problem for Taiwanese children. If conflict occurs, one would expect quick
resolution so that harmony would be reinstated. Because of the Confucius principles permeating throughout Taiwanese society, conflict is not expected to be a threat to the security of friendships.
Chapter 2

METHOD

2.1 PARTICIPANTS

The participants for this study consisted of Grade 3 and 4 students from a middle-class suburb in Toronto, Canada and a middle-class suburb from Taipei, Taiwan.

Canadian children normally attend school from 9:00 a.m. to 3:30 p.m. Monday to Friday with two 15 minute recess periods during each day. Children who are not bussed to school and who eat lunch at home comprise the majority.

In contrast, Taiwanese children attend school Monday to Friday and on Saturday morning. During the weekdays, school begins at 7:30 a.m. and ends at 4:30 p.m. There are eight periods of classes per day with 6-10 minute breaks in between each. Most students stay at school for lunch.

2.2 PROCEDURES

Both the Canadian and the Taiwanese participants were recruited using an information letter for parents sent home with the students. A friendship nomination procedure was administered in October and November 1993 to approximately 1227 Grade 3 and Grade 4 Canadian students. The same procedure was administered in November 1995 to approximately 965 Grade 3 and Grade 4 Taiwanese students.
Each student was asked to nominate best friends based on specific
interview questions (see Appendix A). From these nominations, same-sex dyads
were formed from pairs who indicated each other as best friends. An effort was
made to form dyads with partners who rated each other first in their list of best
friends. Where this was not possible, dyads were formed from one partner listing
the other as first and a reciprocated nomination from the other partner being listed
as second or third. If any students did not receive reciprocal nominations they
were not paired nor included in the study. At the completion of the nomination
procedures, 92 Canadian pairs and 248 Taiwanese pairs were formed as
participants in the remaining phases of this study. The Canadian and the
Taiwanese dyads completed the Friendship Qualities Scale (FQS; see Appendix B)
in November 1993 and November 1995 respectively.

2.3 MEASURES

The friendship nomination procedure (Bukowski et al., 1994; Appendix A)
consisted of asking each child to indicate his/her good friends from a list of
participating students at the same school. Each child was allowed unlimited
nominations.

Friendship Qualities Scale (Bukowski et al., 1994). The FQS is a 23-item
self-administered pencil-and-paper questionnaire. Each child is required to rate
how true a sentence describes one of his/her friendships by using a 5-point Likert
scale ranging from 1 = "not true" to 5 = "really true". Bukowski and his colleagues reported a five-factor structure yielding Companionship, Conflict, Help, Security, and Closeness scales. These scales scores are able to discriminate friends from non-friends as well as predict friendship stability. Much overlap was reported among the scales with correlations as high as .61 between the positive dimension scales. The Taiwanese version of the FQS was translated and back-translated.
Chapter 3

RESULTS

3.1 FACTOR STRUCTURE ANALYSES

Confirmatory factor analyses (CFA) were conducted to assess the factor structure of the FQS for the Taiwanese and the Canadian data sets. Confirmation of the five-factor structure reported by Bukowski and his colleagues (1994) was performed separately on the Taiwanese data and the Canadian data. In addition, a two-factor model was tested in light of the high intercorrelations among the four positive subscales (Companionship, Help, Security, and Closeness) reported by Bukowski and his colleagues. These four subscales were combined into one Positive factor, whereas Conflict comprised the second factor. A one-factor model was also tested.

For the final results, modified two-factor and five-factor solutions are presented with the omission of one item from the analyses. The item "My friend and I go to each other's houses after school and on weekends" was problematic and resulted in a negative eigenvalue. This item may have been a problem because Canadian children often spend weekends with family since they usually reside in large neighbourhoods limiting social interactions with friends. Taiwanese students attend school on Saturday and are often enrolled in special tutoring sessions.
For the Taiwanese data, the one-factor model did not meet prevailing criteria for acceptable fit ($\chi^2 = 937.8$, $GFI = .843$, $AGFI = .811$; $RMR = .067$). The modified two-factor and five-factor solutions showed the latter to have the best fit. Respectively, the fit statistics were $\chi^2 = 763.0$, $GFI = .861$, $AGFI = .831$, $RMR = .061$ and $\chi^2 = 566.9$, $GFI = .896$, $AGFI = .868$, $RMR = .057$.

For the Canadian data, the fit statistics for the one-factor model was $\chi^2 = 835.2$, $GFI = .832$, $AGFI = .797$, $RMR = .079$. The fit statistics for the modified two-factor and five-factor models were $\chi^2 = 284.7$, $GFI = .877$, $AGFI = .849$, $RMR = .060$ and $\chi^2 = 310.1$, $GFI = .841$, $AGFI = .810$, $RMR = .069$ respectively. Overall, the two-factor structure was the most parsimonious for the Canadian participants.

### 3.2 FRIENDSHIP QUALITY RATINGS

The Conflict factor and the Global Positive factor were used to analyze the ratings of friendship quality by country and gender. The means and standard deviations for the Positive factor and the Conflict factor are presented in Table 1.

Independent sample $t$-tests revealed Canadian children ($M = 76.4$, $SD = 9.6$) to report higher positive ratings of friendship quality than Taiwanese children ($M = 72.9$, $SD = 8.9$), $t(338) = 3.18$, $p < .01$. Canadian children ($M = 11.5$, $SD = 3.5$) also reported higher ratings of conflict than Taiwanese children ($M = 8.4$, $SD = 2.7$), $t(338) = 7.75$, $p < .001$. 
Ratings across gender between the two countries indicated a non-significant difference in positive ratings of friendship quality between Canadian (M = 75.0, SD = 10.0) and Taiwanese (M = 72.0, SD = 9.1) boys. However, Canadian boys reported significantly higher ratings of conflict than Taiwanese boys (t (159) = 5.00, p < .001). Respectively, the descriptive statistics were M = 11.3, SD = 3.3 and M = 8.8, SD = 2.7.

In contrast to the boys, Canadian girls reported significantly higher positive ratings (t (177) = 2.73, p < .01) and higher conflict ratings (t (177) = 7.20, p < .001) than Taiwanese girls. Respectively, the descriptive statistics for positive ratings were M = 77.8, SD = 9.0 and M = 73.7, SD = 8.7 and for conflict ratings were M = 11.6, SD = 3.5 and M = 8.0, SD = 2.6.

Independent sample t-tests within each country were also executed to investigate gender differences unique to each culture. For the Taiwanese participants, girls (M = 73.7, SD = 8.7) reported higher positive ratings than boys (M = 72.0, SD = 9.1) although the difference was not significant. However, Taiwanese boys (M = 8.8, SD = 2.7) did report significantly higher ratings of conflict than Taiwanese girls (M = 8.0, SD = 2.6), t (246) = 2.67, p < .01. In contrast, there were no significant differences in conflict ratings between Canadian boys (M = 11.3, SD = 3.3) and girls (M = 11.6, SD = 3.5). Canadian positive ratings of friendship quality were similar to the Taiwanese participants in that the
Canadian girls (M = 77.8, SD = 9.0) reported higher positive ratings than the boys (M = 75.0, SD = 10.0) although the difference was not significant.
Chapter 4
DISCUSSION

4.1 FRIENDSHIP DIMENSIONS

One purpose of the present study was to examine whether data attained from a Taiwanese population would display different friendship dimensions from the ones reported by Bukowski and his colleagues (1994) using the FQS. Specifically, it was hypothesized that the two-factor solution would provide a better fit for the Taiwanese data set. Bukowski and his colleagues had reported a five-factor model for their American sample of Grade 5 to Grade 7 students. Results of the present study indicated that Grade 3 and Grade 4 Taiwanese students displayed the same friendship dimensions as the participants in Bukowski et al.'s study. In contrast, the two-factor solution proved to be a better fit for the Canadian participants. The Canadian children in this study appear not to differentiate between the four positive subscales of the FQS.

4.2 POSITIVE AND CONFLICT RATINGS OF FRIENDSHIP QUALITY

The Canadian children reported higher ratings of friendship quality than the Taiwanese children - a finding counter to the second hypothesis. Taiwanese socialization practices and the competitive nature of their society will be examined more closely in attempts to explain this finding.
Family has been a dominant force in traditional Chinese society (Hsu, 1981). Although Western ideals have permeated Taiwanese culture, an emphasis on family remains (Lu & Shih, 1997; Szalay et al., 1994; Yang, 1988). Yang (1988) argued that family changes in regards to cultural ideas are occurring at a much slower pace. This notion of the family as a primary source of social interaction may be particularly emphasized with young children. Dependency on family is taught to Taiwanese children whereas North American children are taught to be independent from family (Szalay et al., 1994). Furthermore, North American children’s social relations are not solely centered on their families, but on their friends as well (Bukowski et al., 1996). Subsequently, it is not so surprising that Canadian children would report higher positive ratings of friendship quality than the Taiwanese children. It is also not surprising, then, that Canadian children would report higher conflict ratings since friends are reported to be more concerned about their performance in activities in relation to each other than with non-friends (Berndt, Hawkins, & Hoyle, 1986; Berndt & Perry, 1990). Furthermore, Taiwan’s lower conflict ratings may be a result of avoidance of confrontations being highly valued in Chinese society (Schneider, Smith, et al., 1997).

Apart from the family, another element to consider is the competitive nature of Taiwanese life. One dominant difference between the Taiwanese and the
North American societies is the former's emphasis on academic studies. Educational achievement is important not only for the financial contributions it can bring to the family, but for family prestige and honor as well (Thornton & Lin, 1994). Taiwanese parents stress the importance of educational attainment early and place much pressure on their children to master their academics (Szalay et al., 1994). Many examinations have to be passed before Taiwanese children can succeed to different types and levels of schools (Lin & Tsai, 1996; Szalay et al., 1994). Taiwanese parents prepare their children for examinations at a very young age (starting from Kindergarten) since only the top 10% will succeed to the most prestigious forms of schooling - colleges or universities (J. Benjamin, personal communication, December 1998). Therein, although Taiwanese children spend more time in school than their Canadian counterparts, they spend considerable amounts of time studying (Thornton & Lin, 1994). It would be likely that the stresses involved in continuously studying and preparing for exams would affect opportunities for social interaction with friends.

4.3 GENDER DIFFERENCES

It was hypothesized that girls would report higher positive ratings of friendship quality than boys. Results indicated both Taiwanese and Canadian girls reported higher positive ratings than their male counterparts although the differences were not significant. These results provide validation for Berndt's
obsenation that more similarities, rather than differences, between the friendships of boys and girls may exist. It appears that this observation may hold for both North American and different cultural populations.

Analyses of the conflict ratings showed only a significant gender difference for Taiwan with boys reporting higher conflict than girls. This finding may reflect the competitive nature of Taiwanese society and the predominance of males being the major breadwinner for the family (Szalay et al., 1994).

4.4 LIMITATIONS AND FUTURE DIRECTIONS

One limitation of the present study is its sole reliance on self-report data. Although self-report measures are important tools in accessing the subjective and intimate nature of friendships, other tools (e.g., behavioral observations of dyadic interaction, ethnography) would be useful to complement and validate the findings.

Even more, this study used only one North American-based measure to assess friendship dimensions. It is possible that other dimensions important to the Taiwanese children were not addressed. It would be helpful to determine if this is indeed true.

Grade 3 and Grade 4 students were participants in this study. It is interesting to note that Yuan and Shen (1998) reported that Grade 7 students placed greater value on interpersonal relationships. Their results, together with the present study’s findings, may indicate a developmental trend in Taiwanese
children's friendships. It may be possible that Taiwanese children place more emphasis on the importance of friendship as they age, become more influenced by Western values, and grow more independently from their families. Longitudinal or cross-sectional designs would be useful tools in addressing these questions.
REFERENCES


Table 1

Descriptive statistics (dyad means) for ratings of friendship quality by country and gender

<table>
<thead>
<tr>
<th></th>
<th>Taiwan</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males (N = 118)</td>
<td>Females (N = 130)</td>
<td>Total (N = 248)</td>
<td>Males (N = 43)</td>
<td>Females (N = 49)</td>
<td>Total (N = 92)</td>
</tr>
<tr>
<td>Positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>72.0</td>
<td>73.7</td>
<td>72.9</td>
<td>75.0</td>
<td>77.8</td>
<td>76.4</td>
</tr>
<tr>
<td>SD</td>
<td>9.1</td>
<td>8.7</td>
<td>8.9</td>
<td>10.0</td>
<td>9.0</td>
<td>9.6</td>
</tr>
<tr>
<td>Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>8.8</td>
<td>8.0</td>
<td>8.4</td>
<td>11.3</td>
<td>11.6</td>
<td>11.5</td>
</tr>
<tr>
<td>SD</td>
<td>2.7</td>
<td>2.6</td>
<td>2.7</td>
<td>3.3</td>
<td>3.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Appendix A

Friendship Nomination Procedure

1. Tell me the names of your good (or close) friends. Which one is your single best friend?

MAKE SURE YOU RECORD THE FRIENDS’ LAST NAME FOR EACH FRIEND:

<table>
<thead>
<tr>
<th>FRIEND</th>
<th>Is _____ at your school?</th>
<th>Is _____ a boy or a girl?</th>
<th>Is _____ in your class?</th>
<th>In the past two weeks, did you play with _____ outside of school or did you phone him/her?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Is there anyone in your class who isn’t really your friend?

3. Do you think friends should have a chance to help each other with schoolwork or homework, or should everybody work by themselves?

4. Is it good to have friends who:
   a) always like to do the same things, OR
   b) who like to do different things?
Appendix B

Friendship Qualities Scale

Examples:

X1. If I told ______ a secret, I could trust him/her not to tell anyone else.

X2. If ______ got something new, s/he would share it with me.

Questions:

1. ______ and I spend all our free time together.

2. If I have a problem at school or at home I can talk to ______ about it.

3. If other kids were bothering me, ______ would help me.

4. ______ thinks of fun things for us to do together.

5. ______ helps me when I am having trouble with something.

6. If ______ had to move away, I would miss him/her.

7. When I do a good job at something, ______ is happy for me.

8. Sometimes ______ does things for me or makes me feel special.

9. I can get into fights with ______.

10. ______ would stick up for me if another kid was causing me trouble.

11. ______ can bug me or annoy me even though I ask him not to.

12. If I forgot my lunch or needed a little money, ______ would loan it to me.

13. If I said I was sorry after I had a fight with ______, s/he would stay mad at me.

14. ______ and I go to each other’s houses after school and on weekends.

15. Sometimes ______ and I just sit around and talk about things like school, sports, and other things we like.

16. ______ would help me if I needed it.

17. If there is something bothering me I can tell ______ about it even if it is something I cannot tell to other people.

18. If ______ or I do something that bothers the other one, we can make up easily.

19. ______ and I can argue a lot.

20. ______ and I disagree about many things.

21. If ______ and I have a fight or argument we can say “I’m sorry” and everything will be alright.

22. I feel happy when I am with ______.

23. I think about ______ even when ______ is not around.