NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, S.R.C. 1970, c. C-30, et ses amendements subséquents.
Peer Relations as Moderators of Family Influences on Pre-adolescent Self-Esteem

Cyma M. Gauze

A Thesis
in
The Department
of
Psychology

Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts at Concordia University Montreal, Quebec, Canada

July, 1991

© Cyma M. Gauze, 1991
The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

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

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelle forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

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

ISBN 0-315-68754-1
Abstract

Peer Relations as Moderators of Family Influences on Pre-adolescent Self-Esteem

Cyma M. Gauze

The purpose of this study is to investigate the role of friendship relations in adjustment, and to assess whether children's relations with peers moderate the relationship between family environment and self-esteem.

Subjects included 138 fourth, fifth and sixth grade students and their parents, recruited from two English elementary schools in Quebec. Family environment was assessed by parents using the Family Adaptability and Cohesion Scale (Olson, 1986). Sociometric nomination procedures were used to determine the extent to which children experienced a reciprocated best friendship, and the Bukowski Friendship Qualities Scale (Bukowski, Boivin & Hoza, 1991) was used to measure the quality of children's best friendships. The Perceived Competence Scale for Children (Harter, 1985) was used to assess the outcome measure of self-esteem.

Results indicate that reciprocated relations with peers moderate the association between being reared in a non-optimal family environment and lowered self-esteem. For children from more optimal family environments, having a reciprocated best friendship is not associated with enhanced levels of self-esteem. In addition, it was found that irrespective of family climate, having a higher quality best
friendship is associated with higher levels of self-esteem.
Acknowledgements

I would like to express my appreciation to Dr. William Bukowski for his thoughtful guidance and endless support during the completion of this project. I would also like to thank Dr. Anna-Beth Doyle and Dr. Donna White for their helpful comments on earlier drafts of this thesis.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Friendship in Childhood</td>
<td>1</td>
</tr>
<tr>
<td>Peers as Social Supports</td>
<td>7</td>
</tr>
<tr>
<td>The Importance of the Pre-Adolescent Period</td>
<td>12</td>
</tr>
<tr>
<td>Assessing Family Environment</td>
<td>13</td>
</tr>
<tr>
<td>Assessing Peer Relations</td>
<td>19</td>
</tr>
<tr>
<td>Assessing Self-Reported Adjustment</td>
<td>22</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>23</td>
</tr>
<tr>
<td>Method</td>
<td>26</td>
</tr>
<tr>
<td>Subjects</td>
<td>26</td>
</tr>
<tr>
<td>Procedure</td>
<td>26</td>
</tr>
<tr>
<td>Measures</td>
<td>26</td>
</tr>
<tr>
<td>Sociometric Nominations</td>
<td>26</td>
</tr>
<tr>
<td>Bukowski Friendship Qualities Scale</td>
<td>27</td>
</tr>
<tr>
<td>Perceived Competence Scale</td>
<td>28</td>
</tr>
<tr>
<td>Family Adaptability and Cohesion Scale</td>
<td>31</td>
</tr>
<tr>
<td>Results</td>
<td>33</td>
</tr>
<tr>
<td>Relationship Between Family Environment, Friendship Mutuality and Self-Esteem</td>
<td>34</td>
</tr>
<tr>
<td>Relationship Between Family Environment, Friendship Quality and Self-Esteem</td>
<td>38</td>
</tr>
<tr>
<td>Discussion</td>
<td>40</td>
</tr>
<tr>
<td>References</td>
<td>46</td>
</tr>
<tr>
<td>Appendix A</td>
<td>50</td>
</tr>
<tr>
<td>Appendix B</td>
<td>53</td>
</tr>
<tr>
<td>Appendix C</td>
<td>55</td>
</tr>
</tbody>
</table>
List of Tables

Table 1. Internal Reliability of Four Friendship Quality Subscales

Table 2. Pearson Correlations Between Friendship Quality Scale and Four Subscales

Table 3. Means and Standard Deviations of Variables

Table 4. Mean General Self-Worth Scores of Children from Different Family Environments, With and Without a Reciprocated Friendship

Table 5. Mean General Self-Worth Scores of Children from Different Family Environments, With and Without a Reciprocated Friendship
# List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Letter of Explanation</td>
<td>50</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Parental Consent Form</td>
<td>53</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Child Consent Form</td>
<td>55</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Sociometric Nominations</td>
<td>57</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Bukowski Friendship Qualities Scale</td>
<td>60</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Perceived Competence Scale for Children</td>
<td>65</td>
</tr>
<tr>
<td>Appendix G</td>
<td>Family Adaptability and Cohesion Scale</td>
<td>70</td>
</tr>
</tbody>
</table>
Introduction

A basic premise of the literature on peer relations during the last decade is that adequate relations with peers are central to healthy social and emotional adjustment, and that children lacking in such relations are at risk for maladaptive developmental outcomes (Hartup, 1983). Nevertheless, the aspects of, and manner in which, peer relations contribute to specific areas of social and emotional adjustment is not well understood (Bukowski and Hoza, 1989). The purpose of this study is to further investigate the role of friendship relations in adjustment. The particular goal is to ascertain whether relations with peers help children cope with stresses in other areas of their social lives. Accordingly, the overriding hypothesis of this study is that children from families whose climate is not optimal for healthy psychosocial development are likely to show adequate levels of self-esteem if they are able to achieve satisfactory peer relationships.

Friendship in Childhood: Theoretical Background

A significant number of theorists have commented on the importance of friendship relations in the growth and adjustment of children. Lewis and Feiring (1989) found that friendships may fulfill varied functions, including both teaching and nurturance roles. Hartup (1973, 1977, 1989) commented that it is difficult to conceive of normal development in the absence of peer interaction. He termed friendships "developmental advantages" in socioemotional...
development, in that children who maintain friendships may use them as ideal contexts for learning such social skills as co-operation and achieving intimacy. Furthermore, he commented that children who lack exposure to these relations among co-equals may subsequently lack skills necessary for social interactions, such as communication skills, competence in dealing with aggressive impulses, perspective taking, and the development of moral values.

In addition, research has shown that children turn to peer relations as a source of security and support (Barnett, 1982). As the centre of their activities becomes oriented away from the home, children tend to rely more on non-family members for a sense of belonging and worth (Lewis and Feiring, 1986). Thus, being able to confide in a friend may promote feelings of trust, acceptance and being understood (Furman and Robbins, 1986). In turn, serving as a confidant to a fellow peer may allow a child an opportunity to provide help and support, and may perhaps promote confidence or a sense of value.

Finally, researchers have commented on the importance of children's interpersonal relations in the development of the "self". In particular, Harry Stack Sullivan (1953) theorized at great length on the manner in which adequate peer relations are essential for the development of a healthy self-concept. Sullivan proposed that different aspects of a child's peer relations play critical roles
during different periods of development. He focused in particular on two types of peer experience related to the self.

First, Sullivan noted that between the ages of 7 and 9, being accepted by the peer group is of paramount concern to children. He observed that children ostracized by the peer group at this time show "durable evidence" of having had such an experience. He noted that isolation from peers during this period leads to feelings of inferiority and loneliness that are detrimental to good self-esteem. Sullivan (1953) termed this time span the "Juvenile Period", during which a critical component of children's peer relations and sense of the "self" is acceptance by the peer group.

By contrast, during the "pre-adolescent period," between the ages of eight and a half and ten, Sullivan (1953) commented that individuals manifest a marked need for interpersonal intimacy with an individual peer. This "chumship", as it is termed, is a close mutual relation with a same-sex peer that is distinct from other social relationships. As a relation among co-equals, Sullivan reasoned that the chumship provides pre-adolescents with an opportunity for intimacy and reciprocity that is unavailable in other types of peer relations. He theorized that through this friendship, a child may for the first time draw close to another, may adjust his or her behavior for the needs of
another, and may see him or herself from another's perspective. Within the forum of the chumship, Sullivan hypothesized that preadolescents learn to recognize the esteem and positive feelings held for them by their chum, and develop interpersonal sensitivity and validation of their self-worth.

Sullivan (1953) viewed friendships in preadolescence as a source of great psychotherapeutic value. He theorized that during this period, the structure of the "self-system", or the organization of experience concerned with protecting self-esteem, is open to influences through exposure to close, reciprocated friendship. In particular, he felt that during this stage, due to the pre-adolescent's increased capacity for change, earlier deviations or prior influences from family life could be modified and corrected. Therefore, a central proposal of Sullivan's theory of peer relations is that the positive experience of having a close friendship with a valued peer will protect children from the negative effects that result from deficient experiences with family members.

As may be seen by a review of the literature, much attention has been paid to the importance of children's interactions with peers in development. Hymel and Rubin (1986) caution that there is no definitive, one to one correspondance between early peer difficulties and later social maladjustment, in that not every child rejected by
peers in childhood is destined to face adjustment problems later in life. However, as the research indicates, peer relations in childhood may be considered crucial in the acquisition of skills related to both social and emotional adjustment. Yet, despite an abundance of literature that has focused on the importance of children's interactions with peers, a number of serious criticisms have been raised concerning the limitations of research in this area.

First, Ladd (1989) commented that since peer relations occur within a larger social framework, their potential contribution to child development should be explored in relation to other socialization contexts, such as the family. Numerous investigators have documented that the characteristics of children's parent-child and peer relationships are related to socioemotional adjustment, and these relations have typically been examined in isolation from one another. Like Ladd, others have maintained (Furman, Adler and Buhrmester, 1984; Furman and Buhrmester, 1985; Wehner and Furman, 1989) that investigators should be examining children's relationships from a network perspective, in order to evaluate the relative contributions of different relationships to adjustment. Thus, there seems to be a need in the literature for an integrative understanding of how children's ranges of personal relationships interact to affect development.

Second, children's relations with peers may vary
considerably, in that children may experience relations characterized as close friendships, casual acquaintances, antagonistic relations and others. However, as Furman & Robbins (1986) noted, investigators have commonly not differentiated among these relationships in their research describing peer relations. In addition, while the group-oriented experience of popularity and the dyadic experience of friendship have often been distinguished in the theoretical literature (Sullivan, 1953; Weiss, 1973), these two aspects of peer relations have often been blurred in research. In fact, most studies have focused on general and global indices of popularity, while our knowledge of the bilateral and intimate relations characterized by friendship remains limited (Bukowski & Hoza, 1989). Thus, there remains a need to investigate the unique benefit of individual friendship relations for children.

Bukowski and Hoza (1989), in their review of the peer relations literature, conclude that future research must address these issues, in order to clarify the contributions of different aspects of peer relations to adjustment. The proposed study aims to address these considerations while exploring in further detail the contribution of peer relations to one component of adjustment in pre-adolescent children, self-esteem. Based on the writings of Sullivan (1953), this study will focus on the functions of friendship in self-reported adjustment, investigating whether
friendship relations may decrease children's vulnerability to stress associated with non-optimal family experiences. Children's relations with peers will be studied in the context of another relationship in their social network, namely the family. Peer relations will be examined in a comprehensive manner using different indices of friendship. Finally, the study will assess whether there is a role for children's friendship relations as a moderator of the relationship between family stress and self-esteem, with the ability to influence the association between a non-optimal family environment and reduced self-esteem in children.

Peers as Social Supports

During the past fifteen years there has been a surge of interest in social support, by which interpersonal relationships are hypothesized to protect individuals from the deleterious effects of stress. In fact, there is a large body of evidence indicating that individuals experiencing stressful conditions can diminish their level of mental distress if they perceive that they have available emotional supports. As an example, Kessler, Price and Wortman (1985) found that adults cope more successfully with stressful events when they feel they have friends they can rely on for comfort, assistance and advice. Yet, in past years, most of the research related to support networks has focused on adults to the exclusion of children (Berndt and Perry, 1986). Of the studies that have been devoted to children's
support systems, much of it has focused on the role of family and kin in helping children under stress. Yet, it is evident that children might also make use of peers as sources of support (Berndt and Perry, 1986; Hetherington, 1984).

One area where the potential role of peers in protecting children from stress has been highlighted is in the literature on divorce. Hetherington (1989) noted that divorce and remarriage are often associated with experiences that place children at risk for the development of social, psychological, behavioral and academic difficulties. She reasoned that these experiences tamper with the sense of security, continuity and protection usually obtained from the family system, and are often perceived by children as highly stressful. And yet, despite the vulnerability of children of divorced families, many of them emerge as competent or even enhanced following their experiences in the family.

Hetherington (1984) found that older children's adjustment to divorce tended to be better than younger ones', because older children may rely relatively more on resources outside of the home as sources of information, satisfaction and support. Similarly, Wallerstein (1983) found that children who have the support of patient and loyal friends and concerned teachers, are better able to offset deprivations in the home. Of interest, Weiss (1975)
commented that older children, more than youngsters, have the option of disengaging from the family and seeking gratification elsewhere if the home situation is particularly painful. Thus, while family support appears most important in times of stress, in families where such support is unavailable, an exceptionally good external relationship may buffer the effects of stressful life events or the ongoing stress of a relationship with an abusive, antisocial or rejecting parent (Hetherington, 1989).

Like Sullivan (1953), Hetherington maintains that relationships with peers can attenuate the effects of stressful and non-supportive family relationships by providing validation of self-worth, competence and personal control. From the reverse perspective, she (1989) also found that children dealing with parental divorce who are either actively rejected by the peer group or who simply lack even one close friend, show increased long term problems in adjustment relative to others. She concluded that in order to enhance development in this situation, children need not attain a high level of general popularity. Rather, she suggested that a supportive relationship with a single friend could moderate the adverse effects of marital transitions, as well as moderating the consequences of rejection by other peers.

Of importance, researchers have detected a sex difference in the manner in which children of divorced
parents make use of social supports. Wallerstein (1987) found that the girls in her sample were more likely to find sustenance and draw support from their social relationships than were the boys. Similarly, Hetherington (1989) found that in times of family stress, boys are less able than girls to engage in self-disclosure and to solicit support from adults and peers. This raises the possibility that the role of peer relations in moderating the stress of children from non-optimal family environments may vary for boys and girls.

In summary, there is evidence from the divorce literature that children undergoing family stress adjust more easily if sources of social support outside the family are readily available. As well, these studies indicate that peers can be effective in adopting these supportive roles.

Further support for the potential of peer relations as a moderator of family stress is provided by the integrative studies investigating the functions of various relations in children's social networks. Furman and Buhrmester (1985) reported that there is considerable overlap in children's relationships, in that most social provisions provided by significant others can be obtained from multiple sources. For instance, they noted that children who lack adequate peer relations may be able to partially compensate for the provisions they lack in these relationships by relying on their other social relationships. Similarly, it seems
reasonable that if a parent is unwilling or unable to fulfill a child's needs, or if a family environment is not optimal, a child could seek out social provisions from an individual outside the home. Wehner and Furman (1989) investigated patterns of significant relationships in children's social networks in order to ascertain the integrative impact of these relations on the adjustment of seventh to twelfth grade adolescents. Wehner and Furman had adolescents assess their relationships with parents, siblings, relatives, teachers and friends along ten characteristics describing support, negative interactions and relative power in each relationship. They found that the presence of two or more unsatisfying relationships, regardless of type (parent or best friend), is associated with poor self-reported adjustment. However, they found that children who benefitted from two satisfying relationships showed relatively better self-reported adjustment, particularly if one of these two relationships was with a best friend.

Again, the research in this area suggests that children's relations with peers make a beneficial contribution to adjustment when familial relations are less than optimal. The purpose of this study is to determine whether friendship relations may moderate the effects of deficient family relations on adjustment. In particular, this issue will be addressed with respect to preadolescent
children in the fourth to sixth grades.

The Importance of the Pre-Adolescent Period

As previously explained, Sullivan (1953) viewed pre-adolescence as a highly significant period, during which peer relations could serve the specific purpose of modifying the deleterious effects of prior deficient experiences and influences within the family. Other theorists have also commented on the importance of pre-adolescence as a period in which relations with peers play a critical role. Furman and Buhrmester (1985) commented that pre-adolescence is a notable period of transition. Prior to this period, parents are the key providers of intimacy for children. However, once children grow older, friends become increasingly frequent sources of intimacy, and serve also as key providers of companionship. Similarly, Furman and Robbins (1986) compared the social provisions obtained in different relationships within children's social networks. Among fifth and sixth grade students, friends were found to be a particularly important source of both intimacy and companionship, with only ratings' of mothers' intimacy reaching as high levels. Therefore, it seems clear that during the pre-adolescent period, as children's explorations and connections outside the home increase, peer relations may play a particularly significant role in adjustment.

In summary, it has been shown that peer relations are central to children's healthy development, and that they may
play a particularly powerful role during the preadolescent years. The present study will investigate the influence of friendship relations on the adjustment of preadolescent children, and the strength of these relationships as moderators of the stress of growing-up in a non-optimal family environment.

**Issues of Measurement**

Once it is established that peer relationships may be considered as a potential moderator in the relationship between a non-optimal family environment and adjustment, a central issue evolves as to how one may assess the complex variables of family climate, peer relations, and adjustment. As previously highlighted, there has been a call for the use of more differentiated and comprehensive instruments in the current research. The discussion that follows will include a description of the measurement issues and measurement instruments relevant to this study.

**Assessing family environment.** The Family Adaptability and Cohesion Scale (FACES) is an intuitively derived but empirically validated self-report measure of family functioning (Olson, Sprenkle and Russell, 1979). The FACES, a self-report measure, is based on Olson's circumplex model of marital and family systems. The FACES has been used to investigate the relationship between family symptoms and types of family systems, and changes to family systems prior to, during, and following therapeutic intervention. The
FACES is currently being used in over 3000 projects, and has been revised several times in order to increase its validity, reliability, and clinical utility (Olson, 1986).

Both the FACES and the circumplex model from which it is derived measure group properties of families, as opposed to individual or dyadic characteristics of relationships. In particular, two dimensions of family functioning are assessed, cohesion and adaptability. The dimensions of cohesion and adaptability are often found in the family systems literature. As well, they are found to be salient and relevant in several disciplines of the social sciences, such as sociology and anthropology (Olson, Sprenkle and Russell, 1979).

Family cohesion relates to the emotional bonding between family members, as well as the degree of personal autonomy and individual experiences within the family system. The level of cohesion in the family is determined through an assessment of such content areas as emotional bonding, family boundaries, coalitions in the family, time spent together with family members, extent of personal space, perceptions of friendships outside the family unit, decision-making and interests and recreation. It is hypothesized that balanced levels of moderately low or moderately high cohesiveness are optimal for family functioning, while the extremes of disengagement or enmeshment are viewed as problematic to family functioning.
When cohesion levels are extremely high, there is overidentification with family members so that the need for concensus and loyalty to others within the unit prevents independent development. At the other extreme, when cohesion levels are very low, family members pursue their own autonomy with limited attachment to one another and to the family unit. In the central area, when cohesion is balanced, family members are able to reconcile their independent development and the need for cohesiveness of the family, so that they deal most effectively with situational stress and developmental change among family members (Olson, Russell and Sprenkle, 1980).

Family adaptability refers to the ability of a family system to change its power structure, established roles and social rules in response to situational and developmental stress (Smets & Hartup, in press). The level of adaptability in the family is determined through an assessment of such content areas as: leadership, roles, and discipline in the family; levels of assertiveness and negotiation allowed for in family interactions; and relationship rules in the family unit. It is hypothesized that balanced levels of moderately low or moderately high adaptability are optimal for family functioning, while the extremes of rigid and chaotic would be less than optimal.

In the circumplex model, both change and stability are viewed as necessary requirements for adaptive families:
Families require some degree of stability in order to survive as a cohesive unit, so that they may build up common values and expectations that are necessary for intimate communication, and maintain clear social rules and discipline. However, given continual changes in age of family members, change in family composition and the need for evolution in family rules, families must be capable of reorganizing and adapting to normal developmental transitions. Thus, the family that finds itself in the central levels of the adaptability dimension is seen as the most viable. When families find a balance along this dimension, it is hypothesized that mutual communication will be facilitated, rules and roles will be maintained through consensus and sharing, there will be successful negotiation within the home, and the family will be flexible in meeting new challenges and arriving at decisions (Olson, Russell and Sprenkle, 1980).

Through the assessment of the two dimensions of cohesion and adaptability, the general quality of family climate may be determined. Families may be divided into three general types: balanced families, who score centrally on both dimensions; midrange families, who score extremely on one dimension and balanced on the other; and extreme families, who score extremely on both dimensions. The major tenet of the circumplex model is that balanced families will function more adequately across the life cycle than families
who score extremely on either or both dimensions. Thus, among problem families the model stipulates a curvilinear relationship between cohesion and adaptability and family functioning, in which an extremely high or low score on either scale will be detrimental to the family unit.

The literature provides empirical support for the basic hypotheses of Olson's circumplex model. Research has shown that functional families tend to have balanced scores on both cohesion and adaptability, while families in serious difficulty tend to have extreme scores on one or both of these dimensions. While no specific family type has been associated with any particular symptomatology, studies of clinical samples indicate that the FACES model distinguishes reliably between problem and non-symptomatic families, when considering a wide range of difficulties such as alcoholism and schizophrenia (Olson, 1986).

Minuchin (1974) suggests that stress, caused by internal or external pressures to the family system, often produces the need for family change. This may occur when members join or leave the family, or when developmental changes in family members evolve. It is conceivable that in times of acute stress or following a crisis, adopting an extreme family climate might be functional for a limited period of time. For instance, extremely enmeshed functioning may be appropriate for supervising a young infant, but as a child develops and seeks increased autonomy, rigid adherence
to this predominant style could become problematic. Lewis (1974) noted that individuals' adaptation to change is facilitated when individuation from the family is achieved. When individuation is incomplete, separation and growth are resisted and family pain and difficulty are increased. This finding has particular relevance when considering that preadolescent children tend to seek increased autonomy and contacts outside the family unit. From the reverse perspective, Maccoby and Martin (1983) caution that during middle childhood children yearn to explore new freedoms and independence outside the home, but they still rely on their parents for guidance, support, and supervision as needed.

In accordance with this view, relations between parents and children during preadolescence require continuing negotiation and sensitivity. As noted by one group of theorists, family units characterized by rigidity, enmeshment or disengagement will have a particularly difficult time coping during this period (Smets and Hartup, in press). While balanced families may shift to more extreme characteristics of functioning in an attempt to alleviate difficulties, they tend to resume balanced functioning once a problem is resolved. By contrast, non-balanced family types have a more restricted behavioral repertoire, are more resistant to change even when conditions require it, and tend to have poorer communication skills (Olson, 1986). As well, Baumrind (1973) has reported that authoritarian,
disengaged and permissive parenting styles are associated with the development of behavior problems in children. Taken together, these findings support the hypothesis that children raised in non-balanced family climates will be exposed to family experiences that are less than optimal for social and emotional development.

In summary, the dimensions of adaptability and cohesion have been found to be useful and salient in the family systems literature, and are found to discriminate meaningfully among high functioning and other families (Olson, Rusell and Sprenkle, 1980). Therefore, the FACES will be used in this study as a measure of general family climate among all members of the family system.

Assessing peer relations. In order to gain an understanding of the efficacy of children's friendships as a buffer against family stress in adjustment, two crucial aspects of these relations need be explored. These include the extent of bilaterality as well as the qualitative characteristics of a friendship.

Most children who are questioned as to whether they have a particularly close friendship will readily name a peer, even if they lack such a relationship with that peer. In this study, the extent to which a child experiences reciprocated, bilateral liking with peers will be explored through the use of sociometric nominations. The level of reciprocity in friendship is an important variable to
consider in an evaluation of friendship relations. Reciprocated friendships in early adolescence have been found to be more stable than unreciprocated friendships (Bukowski and Newcomb, 1984). As well, these relations have been found to foster higher levels of shared interpersonal knowledge and intimacy than other relationships (Ladd and Emerson, 1984). Of particular interest in this study is the extent to which reciprocated friendships with peers are able to buffer children from the stress of a non-optimal family environment.

In addition, when assessing the impact of friendship relations on adjustment, it is necessary to investigate the quality of children's closest friendships, in order to ascertain the degree to which these relations may serve as a source of support and stability. In this study, quality of friendship will be examined with the Bukowski Friendship Qualities Scale (Bukowski, Boivin & Hoza, 1991). The Friendship Qualities Scale is a rating instrument designed to assess children's and early adolescents' impressions of their relationship with their best friend. Based on the conceptual and empirical literature on children's and early adolescent's beliefs about friendship, the scale assesses, among other qualities, four important dimensions of friendship that appear to be salient in children's best relationships: 1) Play and Companionship, which focuses on the amount of voluntary time the two friends spend together;
2) Help and Aid, which focuses on the degree to which there is mutual help and assistance in the relation as well as the extent to which the child perceives his/her friend as willing to protect him/her from victimization by other peers; 3) Security, which focuses on the degree to which the child believes that he/she can rely on his/her friend in times of need, and the extent to which he/she believes that the friendship is strong enough to transcend negative events and problems; 4) Closeness, which focuses on the sense of affection or "specialness" that the child experiences in his/her friendship, and the strength of the attachment bond in the relationship. This dimension assesses the child's feelings about his/her friend, as well as the child's impressions of how important he/she is in turn to the best friend.

The *Friendship Qualities Scale* has been shown to be both a reliable and valid means of assessing meaningful aspects of children's friendships. Its multi-dimensional structure and the minimal level of multicollinearity among its subscales render it a useful means of assessing the quality of children's best friendships. As well, the closed-ended format of the *Friendship Qualities Scale* is well-suited to the demands of this study. This format provides a reliable measure of individual differences in children's friendship experiences and is amenable to higher level statistical procedures that will be used in this research
(Bukowski and Hoza, 1989).

Assessing children's self-reported adjustment. Thus far in this research, an attempt has been made to utilize measures that are comprehensive yet detailed in their assessment of both family climate and peer relations. With respect to the outcome variable of adjustment, a focus will be maintained on determining children's perceptions of their global self-esteem. The Perceived Competence Scale for Children (Harter, 1982) is a self-rating instrument that assesses among other things, children's general sense of self-worth. Harter views self-worth as a construct that is more than a simple aggregation of responses obtained from a wide range of particular abilities. Rather, she views it as an indication of how much a child likes himself or herself, and values his/her own worth as a person (e.g. feeling good about themselves, feeling sure of themselves).

The Harter Scale uses a "structured alternative format" (Harter, 1982) that attempts to offset children's tendency to provide socially desirable responses, as often occurs in true-false formats. In this forced choice format, the phrasing of the instructions and items implies that any choice children make is legitimate and common. Children have been found to use the entire range of items provided on Harter's Scale, even those implying the least amount of competence. As well, Harter's scale has a stable factor pattern through the third to sixth grades. Due to the
strength of its structure, its conceptual detail, and its appropriateness for the age group under investigation, the Perceived Competence Scale will be used to assess self-esteem in pre-adolescent children.

As has been reviewed, relations with peers play a central role in children's development, and may be viewed as a potentially rich source of social support in preadolescent children. In this study, it will be determined whether friendship relations moderate the relationship between the stress of a non-optimal family environment and self-reported adjustment. Family environment will be assessed from a global perspective by parents. Families will be assigned to different family climate groups, according to their scores on the two dimensions of family environment in the FACES, adaptability and cohesion. Peer relations will be assessed in terms of the extent of reciprocity in children's best friendships, as well as the quality of their best friendship relation. The outcome measure, children's self-esteem, will be assessed using each child's responses to the general self-worth scales of Harter's Self-Perceived Competence Scale (1982).

Hypotheses

This study will examine three issues. The first question is whether there is a significant main effect for family type, with children raised in different family environments exhibiting different levels of global self-
worth. The literature emphasizes the importance of a balanced family environment for children's healthy social and emotional development. Therefore, it is hypothesized that children from balanced families, who score midrange on the dimensions of adaptability and cohesion, will show relatively better levels of self-esteem than children from non-balanced families, who score high or low on these characteristics. The second question is whether there is a significant main effect for peer type, with children who experience differential qualities of friendship relations reporting different levels of global self-worth. The hypothesis is that children who experience relatively poor peer relations, will report lower levels of self-esteem than children with a higher overall quality of peer relations. The third question is whether there is a significant interaction effect between type of family environment and type of peer experience. The hypothesis is that children's peer relations moderate the association between growing up in a non-optimal family environment and lowered self-esteem. If this moderating effect is complete, then children from non-optimal family environments who also enjoy supportive friendship relations, will report levels of self-esteem similar to children from more optimal family environments who enjoy positive friendship relations. Each of these hypotheses will be analyzed to determine if there are sex effects in the manner in which peer relations contributes to
adjustment in children from different family environments.
METHOD

Subjects

The subjects in this study include 138 fourth, fifth and sixth grade children (57 boys, M = 10.86 years; 81 girls, M = 10.71 years). These English-speaking students were chosen from two rural primary schools in the Montreal region. Parents of the children were informed of the study by mail and were also asked to participate (Appendix A). Parental consent (Appendix B) was obtained for 81% of the children and 57% of the parents to participate. Remuneration of ten dollars was provided to each participating family following completion of the study.

Procedure

All participating children were met in their classrooms during the school day and asked to complete questionnaires. The children were asked to complete sociometric nominations, the Bukowski Friendship Quality Scale (Bukowski, Boivin & Hoza, 1991) and the Perceived Competence Scale for Children (Harter, 1982). Parents were asked to complete the Family Adaptability and Cohesion Scale II (Olson, Russell, & Sprengle, 1980) at home, and to return it through the mail. Each of these questionnaires are described in the following section.

Measures

Sociometric nominations. As shown in Appendix C, children were asked to name the same-sex and other-sex
schoolmates whom they considered to be their best friends, and the same-sex and other-sex schoolmates whom they did not like to play with. The children were instructed that they could list as many or as few names as they liked. As well, they were informed that their potential choices were restricted to other children participating in the study, whose names were listed and circulated. A rural school district was chosen for this study to maximize the possibility that the children whom the subjects would potentially list as friends would be schoolmates. Children nominated an average of 4.11 best same-sex friends each, and an average of 2.61 other-sex friends.

Using the information from the sociometric nominations the mutuality score was derived. Mutuality is a dichotomous variable reflecting whether the peer the target child rates as his/her first best same-sex friend, in turn rates the target child as his/her first best same-sex friend. Children were assigned to one of two groups, depending on whether or not they experienced this type of mutual friendship. The two groups were close in size, with 73 children having a reciprocated best friendship, and 65 lacking one.

Bukowski Friendship Qualities Scale. As shown in Appendix D, children completed this scale (Bukowski, Boivin & Hoza, 1991) in which they were asked to rate the quality of their best same-sex friendship. Children were presented with 46 statements characterizing different attributes of their best friendship relation (e.g. "If I felt sad or upset..."
my friend would try to cheer me up"). Children were asked to rate to what extent each statement was true for their friendship on a standard five point likert-type scale, ranging from "not true" to "really true".

The friendship quality score is an average of the child's ratings of his/her best friendship on the four dimensions of Companionship, Help/Support, Security and Closeness. Cronbach's alpha was calculated for the four subscales and the friendship quality score. As reported in Table 1, the alpha values for the four subscales are generally high, and the friendship quality score has an alpha value of .88. Pearson product-moment correlations of each of the subscales with the friendship quality score are reported in Table 2. The friendship quality score was standardized for each child relative to the entire sample. Children were divided into one of two groups, based on whether they rated their friendship as being of "high" or "low" quality. Children whose score was greater than the median were considered to have a high quality best friendship, while children whose score was below the median were considered to have a low quality best friendship. The friendship quality score was found to correlate minimally with the mutuality score, $r = .19$, $p < .001$.

Perceived Competence Scale for Children. Children completed the Perceived Competence Scale for Children (Harter, 1982), a "structured-alternative" format questionnaire (Harter,
**Table 1**

**Internal Reliability of Four Friendship Quality Subscales**

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. items</th>
<th>Alpha level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play/Companionship</td>
<td>5</td>
<td>.66</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
<td>.77</td>
</tr>
<tr>
<td>Closeness</td>
<td>5</td>
<td>.69</td>
</tr>
<tr>
<td>Help</td>
<td>5</td>
<td>.72</td>
</tr>
</tbody>
</table>
Table 2

**Bivariate Correlations Between Friendship Quality Scale and Four Subscales**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Friendship Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play/Companionship</td>
<td>.76**</td>
</tr>
<tr>
<td>Security</td>
<td>.83**</td>
</tr>
<tr>
<td>Closeness</td>
<td>.85**</td>
</tr>
<tr>
<td>Help</td>
<td>.82**</td>
</tr>
</tbody>
</table>

**p<.01**
1982) assessing children's self-perceived competence in peer relations, school performance, physical skills and general self-worth. As shown in Appendix E, children were presented with 28 items each consisting of two contrasting statements about competence in the various domains (e.g. "I feel good about the way I act" or "I wish I acted differently"). Children were asked to decide which statement applied more to them, then to indicate whether that statement was "sort of true" for them or "really true" for them. Cronbach's alpha was calculated for the general self-worth subscale of the Perceived Competence Scale for Children (Harter, 1982). The alpha value for this subscale of six items was .82.

Family Adaptability and Cohesion Scale. Both the second and third editions of the FACES are currently in use in research (Olson, Russell and Sprenkle, 1980; Olson, 1986). While the third edition of the FACES (1986) is advantageous in that the scales of Adaptability and Cohesion are minimally correlated, the second version of the FACES (1980) includes more items on each scale and possesses better reliability. Therefore, parents completed the FACES II as a measure of assessing patterns of family interaction and family climate. As indicated in Appendix F, the scale consists of 30 statements (e.g. "Family members are supportive of each other during difficult times"), and respondents are asked to indicate the extent to which each statement describes their family climate. Parents provided
their responses according to a five point Likert-type scale, indicating whether each statement "almost never" or "almost always" applied to their family.

Cronbach's alpha was calculated for the adaptability and cohesion dimensions of family functioning, indicating reliability for both. Adaptability has an alpha level of .68, and cohesion has an alpha level of .78.
Results

Initially, analyses were conducted to assess Olson et al.'s (1986) curvilinear model of healthy family functioning. This model asserts that balanced or midrange levels of adaptability and cohesion are optimal, while the extremes of these two variables are problematic for family functioning. To examine the assumption that the relationships between family adaptability and children's adjustment, and family cohesion and children's adjustment are curvilinear, Cohen's partialled powers technique (Cohen, 1978) was used. Using this procedure, a two-step hierarchical regression analysis was conducted. In the first step, one of the family variables (i.e. adaptability or cohesion) was entered into the equation to predict the outcome score (i.e. general self-worth). In the second step, the squared value of that family variable, representing a curvilinear trend, was entered into the equation to predict the outcome score. For the adaptability dimension, results indicated a significant linear relationship between adaptability and general self-worth, $F(1,136) = 6.09$, $p<.05$. No evidence of a curvilinear relationship was observed. For the cohesion dimension, results indicated an absence of any significant linear or curvilinear relationship between cohesion and general self-worth. Since a consistent relationship between cohesion and general self-worth was not observed in the preliminary analyses, the cohesion variable
was excluded from all subsequent analyses.

Children's scores on the dimension of adaptability were converted to Z-scores. Since adaptability was observed to function linearly, children were divided into one of two groups, based on whether their families scored "high" or "low" on this dimension. Children whose families scored greater than the median were considered high while children whose families scored below the median were considered low. The high group consisted of 71 children, while the low group consisted of 67.

Multivariate analysis of variance was conducted to determine whether children's responses to items on the questionnaires differed by grade. The results of this multivariate analysis were non-significant, indicating that children in the fourth, fifth and sixth grades responded similarly on all instruments. In light of the fact that no multivariate grade effects were found among the variables, the three grades were considered as one group in subsequent analyses. The means and standard deviations of all variables are reported in Table 3.

**Family Environment, Friendship Mutuality and Adjustment**

The effects of friendship reciprocity and family environment on general self-worth were examined in children from each of the two family groups. The means from this analysis are shown in Table 4. To assess the relationship between friendship status, family adaptability and general
Table 3

**Range, Mean and Standard Deviation of Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>2.55-4.64</td>
<td>3.76</td>
<td>.42</td>
</tr>
<tr>
<td>Cohesion</td>
<td>2.94-4.94</td>
<td>4.12</td>
<td>.40</td>
</tr>
<tr>
<td>General Self-Worth</td>
<td>0.00-4.00</td>
<td>3.06</td>
<td>.69</td>
</tr>
<tr>
<td>Play/Companionship</td>
<td>1.60-5.00</td>
<td>3.92</td>
<td>.67</td>
</tr>
<tr>
<td>Security</td>
<td>1.60-5.00</td>
<td>4.23</td>
<td>.71</td>
</tr>
<tr>
<td>Closeness</td>
<td>2.40-5.00</td>
<td>4.32</td>
<td>.55</td>
</tr>
<tr>
<td>Help</td>
<td>1.00-5.00</td>
<td>4.17</td>
<td>.71</td>
</tr>
</tbody>
</table>
Table 4

Mean General Self-Worth Scores of Children From Different Family Environments, With and Without a Reciprocated Best Friendship

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Adaptive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With</td>
<td>3.19</td>
<td>.57</td>
<td>40</td>
</tr>
<tr>
<td>Without</td>
<td>3.23</td>
<td>.45</td>
<td>31</td>
</tr>
<tr>
<td>Low Adaptive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With</td>
<td>3.21</td>
<td>.57</td>
<td>33</td>
</tr>
<tr>
<td>Without</td>
<td>2.79</td>
<td>.69</td>
<td>34</td>
</tr>
</tbody>
</table>
self-worth, a 2 (high adaptive/low adaptive) by 2 (mutual friendship/no mutual friendship) by 2 (boy/girl) ANOVA was conducted on the general self-worth scale of the perceived competence measure.

A significant interaction effect for adaptability by mutuality was found, $F(1,130) = 4.72$, $p<.05$. In order to assess the nature of the significant interaction, tests of simple effects were conducted. The results of these analyses indicate that among children from low adaptive families, those with a reciprocated best friendship show significantly higher levels of general self-worth than those who lack such a friendship, $F(1,130) = 8.57$, $p<.05$. However, among children from high adaptive families, children show similar levels of adjustment regardless of whether or not they experience a reciprocated best friendship. Furthermore, results indicate that among children who do have a reciprocated friendship, those from high vs. low adaptive families do not differ in their level of general self-worth.

A main effect approaching significance was found for adaptability, $F(1,130) = 3.51$, $p<.06$, indicating that overall, children from high adaptive families report higher levels of general self-worth than children from low adaptive families. A main effect approaching significance was found for mutuality, $F(1,130) = 3.51$, $p<.06$, indicating that overall, children who experience reciprocated best friendships report higher levels of general self-worth than
children who lack such friendships.

**Family Environment, Friendship Quality and Adjustment**

The effect of quality of the best friendship and family environment on self-reported general self-worth were assessed in children from each of the two family adaptability groups. The means from this analysis are shown in Table 5.

To assess the relationship between family adaptability and general self-worth, a 2 (high adaptive/low adaptive) by 2 (high quality best friendship/low quality best friendship) by 2 (boy/girl) ANOVA was conducted on the general self-worth scale of the perceived competence measure.

A main effect approaching significance was found for adaptability, $F(1,130) = 3.51, p<.06$, indicating that overall, children from high adaptive families report higher levels of general self-worth than children from low adaptive families. As well, a significant main effect was found for quality of best friendship, $F(1,130) = 5.92, p<.05$, indicating that overall, children who experience higher quality best friendships report higher levels of general self-worth than children who have poorer quality friendship relations. No significant interaction effect was found between family environment and friendship quality, $F(1,130) = 1.25, p=.27$. 

Table 5

Mean General Self-Worth Scores of Children From Different Family Environments, With High and Low Quality Best Friendships

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Adaptive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Quality</td>
<td>3.25</td>
<td>.53</td>
<td>41</td>
</tr>
<tr>
<td>Low Quality</td>
<td>3.14</td>
<td>.50</td>
<td>30</td>
</tr>
<tr>
<td>Low Adaptive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Quality</td>
<td>3.16</td>
<td>.67</td>
<td>37</td>
</tr>
<tr>
<td>Low Quality</td>
<td>2.80</td>
<td>.61</td>
<td>30</td>
</tr>
</tbody>
</table>
Discussion

The purpose of this study was to investigate the manner in which relations with peers and family climate contribute to adjustment. Three issues in particular were investigated: first, whether children raised in high adaptive versus low adaptive family environments report different levels of general self-worth; second, whether children who experience different qualities of peer relations report different levels of general self-worth; and third, in accordance with the theories of Sullivan (1953), whether pre-adolescent's friendship relations moderate the reduced levels of self-esteem associated with children who grow up in a non-optimal family environment.

The findings show support for the hypothesis that family environment and children's sense of general self-worth are related to one another. For all children, except those with a reciprocated best friendship, being reared in a poorly adaptive family environment is associated with lowered self-esteem. In such a family climate, negotiation, mutual communication, and flexibility in face of novel situations are greatly inhibited, and authoritarian parenting is characteristic. Maccoby and Martin (1983) characterize middle childhood as a time when parents must initiate new patterns of supervision and support, as their children gain independence and explore new freedoms. It is conceivable that non-adaptive families' inability to
problem-solve creatively and to adapt flexibly to new conditions, is associated with detrimental effects to children's general self-worth. The absence of a significant association between the dimension of family cohesion and general self-worth seems to be particular to the present sample, since in previous research (Smets & Hartup, 1988) the cohesion dimension has been found to be related to children's self-rated competence. Further research must be conducted to clarify this issue.

With respect to the interactive effects of family climate and friendship mutuality on adjustment, the results indicate that among children who lack a reciprocated friendship, the risks of being reared in a non-optimal family environment are compounded: children lacking in a mutual best friendship and raised in a non-adaptive family environment show lower levels of adjustment than all children raised in a more ideal family environment, including both those who possess and those who lack a reciprocated best friendship.

Among children raised in non-adaptive family climates, possessing a reciprocated friendship is associated with significantly higher levels of adjustment. In fact, in children who benefit from a close peer relationship, perceived self-worth is elevated to such a degree that these children show comparable adjustment levels to children reared in more optimal family climates. This finding confirms the hypothesis that intimate, reciprocated peer
relations moderate the association between lowered levels of self-esteem and being reared in a non-optimal family environment, when this environment is defined as poorly adaptive or "rigid". As suggested by such researchers as Sullivan (1953), Furman and Buhrmester (1985) and Hetherington (1989), relations with peers may have the potential to attenuate the effects of stressful or deficient experiences with family members. For children lacking adequate social provisions within the home, peers may serve as a source of validation and support, and may provide a sense of belonging.

Interestingly, reciprocated best friendships do not enhance the perceived self-worth of children raised in highly adaptive families. In a more ideal family climate such as this, children demonstrate similar levels of adjustment irrespective of the extent of mutuality in their relations with peers. It seems that peer relations have the potential to moderate children's adjustment when children find themselves under more vulnerable conditions, such as those created in a relatively rigid or poorly adaptive home environment. By contrast, when necessary social provisions are already provided for within the family unit, it seems that children emerge well-adjusted even when their perceived best friendship is unreciprocated as such.

These findings support the hypotheses of Hoffman, Ushpiz and Levy-Shiff (1988) who refer to adolescents as
"active consumers of social support" who will rely on alternative sources of support if disappointed by their initial providers. In parallel to the results of the present study of pre-adolescent children, Hoffman et. al. hypothesize that support from adolescent friends may become particularly valuable when parental aid is insufficient, but may have substantially less effect when parental aid is available.

With respect to the contribution of friendship quality to adjustment, the results support the hypothesis that children who report differential qualities of peer relations will report different levels of general self-worth. The results demonstrate that irrespective of family environment, children who report that their friendships are of a higher quality, also report higher levels of general self-worth. In accordance with Buhmeister and Furman's (1984) suggestion that friendships are a "crucial ingredient" in fulfilling fifth grade children's need for intimacy, these findings indicate that high quality friendships make a powerful contribution to the adjustment of all children, irrespective of family climate.

The lack of an interaction between quality of friendship and family environment, as found in the results related to friendship reciprocity, highlights the difference between these two aspects of peer relations as measured in this study. Whereas friendship quality as reflected here was
assessed from the perspective of the target child alone, friendship reciprocity was assessed from both the perspective of the target child and his/her nominated best friend. As such, reciprocity is a measure that is validated by the responses of both children in the dyad, and is distinctive from the unilateral perceptions of one child vis a vis the quality of his/her own best-rated friendship. In addition, only a minimal correlation was found between the two variables of mutuality and friendship quality, indicating that these two components of friendship share very little variance. These findings corroborate Bukowski and Hoza's (1989) argument that when considering a child's friendship experiences it is important to determine whether the child has a friend, as well as the quality of this relationship.

In sum, there is evidence that having a reciprocal friendship can moderate the lowered levels of adjustment that are associated with children who grow up in a rigid family environment. Contrary to the implications from the research of Wallerstein (1987) and Hetherington (1989) in their work on divorce, boys and girls from non-optimal family environments do not differ in their ability to benefit from the support of a close reciprocated friendship. For children raised in a more ideal family climate, having a reciprocal friendship does not further enhance reported general self-worth, although all children, regardless of
family environment, seem to benefit from having a friendship they perceive as being of high quality. While these findings may be consistent with a causal model of adjustment, further research of a longitudinal nature must be conducted in order to clarify the direction of the relationship between family environment, friendship relations and self-esteem.

These findings support the hypothesis that both the family and the peer system contribute significantly to children's adjustment (Furman & Buhrmester, 1984; Wehner & Furman, 1989). The results highlight that future research dealing with children's social networks must attend to the integrative and interactive impact of these two influential systems on development. Within the clinical domain, these results give support to the use of peers in clinical interventions for children from problematic family environments. If at-risk children are placed in programs designed to foster close dyadic relations with peers, they may show significant benefits in social and emotional adjustment.
References


personality processes (pp. 15-45). New York: John Wiley & Sons.


Ladd, G.W. (1989) Toward a further understanding of peer relationships and their contribution to child


Olson, D.H. (1986) Circumplex model VII: Validation,
studies and FACES III. Family Process, 25, 337-351.
family cohesion/adaptability and childhood behavior
problems. Journal of Abnormal Child Psychiatry, 16(2),
233-246.
Sullivan, H.S. (1953) The interpersonal theory of
Wallerstein, J. (1983) Children of divorce: stress and
developmental tasks. In Garmezy, M. & Rutter, M. (Eds.)
Stress, Coping and Development in Children (pp. 265-
ten-year follow-up of early latency-age children.
American Journal of Orthopsychiatry, 57(2), 199-211.
networks and its relation to adjustment. Paper
presented at the meetings of the International Society
for the Study of Behavioral Development, Finland.
Weiss, R.S. (1979) Growing up a little faster: the
experience of growing up in a single-parent household.
Appendix A

Letter of Explanation
Dear Parents,

I am a professor at Concordia University, where I teach courses and do research on children and adolescents. One of the topics I study is the way relations with parents, peers, and siblings affect children's feelings about themselves. I am writing to tell you about a study I would like to do with the fourth-, fifth-, and sixth-grade students at the Morin Heights Elementary School. This study will help us learn more about children and their relations with their peers and the members of their families.

As part of the study I am conducting, I will meet with the participating children in their classroom and ask them to complete a questionnaire. Because I want to study how various aspects of children's relations with their peers and their families change as they grow older, we will administer this questionnaire once this spring and again next fall and spring. In this questionnaire, each child will be asked to tell us which of his/her classmates he/she likes the most or generally does not play with, and to tell us how they get along with their best friends, parents, siblings and other members of their families. They will be asked to answer questions about how good they think they are at things like school activities, sports and physical games, and in getting along with peers. Finally, the children will be asked to read some descriptions about instances when someone became a friend of another person or didn't become a friend. They will be asked to evaluate the importance of reasons that might explain why someone had trouble or did not have trouble becoming someone's friend and to rate each reason according to whether it changes or stays the same.

We would also like to ask the children's mother or father to answer some questions for us. These questions will tell us about how members of the family get along and how your child in the study gets along with his or her siblings. If you are willing to answer these questions, we will give your child the questionnaires at school and he or she can bring them home to you. We will provide a pre-stamped envelope so you can return the questionnaires to us. It will take about 20 minutes to complete the scale. As an expression of our appreciation to you for your time, we will send each participating family a cheque for $10.00. Also, the name of each family will be put in a raffle and a winner will receive a cheque for $100.00. Any parent who returns the permission slip to us, regardless of whether he/she agrees to participate or not, and regardless of
whether they complete our forms, will be eligible for the raffle. If you are willing to complete these questionnaires for your children, please check the appropriate space on the enclosed permission form.

Persons who do research with children or adults are required to describe the risks and benefits related to participating in their studies. This study poses no risks, other than the risks that are part of our normal daily lives, and because it is not a "treatment study" it is not intended to provide direct benefits to the students who participate. Most children enjoy participating in studies like this one. The information collected in this study will be completely confidential, and participation is, of course, entirely voluntary. Your child is not required to take part; in fact, even if you give your permission for him/her to participate, you may change your mind at any time. If your child decides that he/she does not wish to participate, he or she does not have to. Also, if you originally indicate that you would like to fill out the questionnaire about family relations but decide you no longer want to, you will not be asked to complete it.

If you have any questions about this study, please call me at 848-2184 (office) or 489-4247 (home). You should also feel free to call Cyma Garze, who is my assistant on this project, at 848-2849. In addition, either of us can be reached by letter at: Department of Psychology, Concordia University, 1455 de Maisonneuve Blvd., ER100, Montreal, Quebec H3G 1M8.

Please fill out the attached form and have your child return it to his/her teacher by next Monday (April 23). Thank you for your help.

Sincerely,

William M. Bukowski
Associate Professor
Appendix B

Parental Consent Form
PARENT CONSENT FORM

The University requires that I ask you to read and sign the following:

Professor Bukowski has described the purposes and procedures of the research study on children's perceptions of themselves, their peers, and their families that he would like to conduct with the fourth-, fifth-, and sixth-grade students at the Morin Heights Elementary School. I understand that the children who participate in Dr. Bukowski's study will be asked to complete a questionnaire at their desks in school in which they will be asked (a) to answer questions about whom they like and do not like to spend time with in school, (b) to describe their relations with family members and peers, (c) to rate the importance of various reasons why someone would or would not become someone's friend, and (d) to indicate how good they think they are at various activities, such as school and sports activities. I understand it will take about an hour for the participants to complete this form and that they will be asked to do this once this fall and again next spring. I know that there will be no direct benefits to my child as a result of his/her participation in this study, and Dr. Bukowski has told me that there are no risks except those that children already encounter in their daily lives. I know that participation is voluntary and that even if my child begins to take part in the study, he or she can stop participating at any time. I understand that my child's responses will be confidential, and that no identifying information will be given in results of this research.

"Also, I or my husband/wife am willing to fill out some questionnaires for Dr. Bukowski telling him how my child in this study gets along with his/her siblings and how our family gets along. I understand that my answers are confidential and that my participation is voluntary."

Please check one of the following:

_____ I give my child permission to participate.
_____ I do not give my child permission to participate.

Please check one of the following:

_____ I am willing to fill out the questionnaires regarding our family.
_____ I do not want to complete these questionnaires.

My child's name is ____________________________

Please sign and print your name here:

Sign________________________________________ Date______________

Print________________________________________

PLEASE HAVE YOUR CHILD RETURN THIS FORM TO HIS/HER TEACHER.
Appendix C

Child Consent Form
NAME

BIRTHDATE________________________AGE_____

BOY______GIRL_____

HOME ROOM TEACHER__________________

STUDENT PERMISSION FORM FOR RESEARCH STUDY ON
HOW CHILDREN GET ALONG WITH THEIR FRIENDS
AND FAMILIES - SPRING 1990

Please read and sign the following statement if you wish to be
in our study.

I have been asked to be in a research study that Dr. W. M.
Bukowski is doing on the perceptions that young people like
myself have of themselves, their families, and their peers. I
know that if I agree to be in the study, I will be asked
to fill out a questionnaire that will include questions about
myself, about who I get along with in school, and how I get
along with my friends and members of my families. I know I will
also be asked to rate the importance of reasons why someone
might or might not become someone else's friend.

I know I do not have to be in the study, and that even if I
start to take part in it, I can quit if I decide that I do not
want to participate any longer. Also, I know that my answers
will be confidential. That is, I know that no one but Dr.
Bukowski, his assistant, and I will know what I say on the
questionnaire. Dr. Bukowski promised me that he will not tell
anyone what I say in the questionnaire. I also know that if I
do not want to answer a particular question in any of the
questionnaires, I can leave the question blank.

My name is:

(Print)_____________________________________

Date__________

(Sign)_____________________________________
Appendix D

Sociometric Nomination Questionnaire
THE FIRST THING WE WOULD LIKE TO KNOW ABOUT IS WHO YOU ARE FRIENDS WITH AND WHO YOU SPEND TIME WITH AT SCHOOL. IN THE SPACE BELOW, PUT THE NAME OF THE GIRLS IN YOUR GRADE WHO ARE YOUR BEST FRIENDS. PUT THE NAME OF THE GIRL WHO IS YOUR BEST FRIEND ON LINE ONE, SECOND BEST ON LINE TWO, THIRD BEST ON LINE THREE, FOURTH BEST ON LINE FOUR AND THEN ANY OTHERS WHO ARE YOUR BEST FRIENDS. YOU CAN LIST AS MANY OR AS FEW GIRLS AS YOU WANT. YOU DON'T NEED TO PUT DOWN A PARTICULAR NUMBER OF NAMES. BUT, THE NAMES YOU CHOOSE MUST BE FROM THE LIST WE GAVE YOU.

1. 

2. 

3. 

4. 

NOW LIST THE NAMES OF THE BOYS WHO ARE YOUR BEST FRIENDS. REMEMBER YOU CAN LIST AS MANY OR AS FEW AS YOU WANT. YOU DON'T HAVE TO LIST ANY IF YOU DON'T WANT TO. BUT, MAKE SURE THE NAMES YOU USE ARE FROM THE LIST.

1. 

2. 

3. 

4. 
THE NEXT THING WE WOULD LIKE TO KNOW IS WHO YOU DON'T LIKE TO SPEND TIME WITH. LIST THE NAMES OF THE GIRLS YOU DON'T LIKE TO SPEND TIME WITH. AS BEFORE, YOU CAN LIST AS MANY OR AS FEW NAMES AS YOU WANT. YOU DON'T HAVE TO LIST ANY IF YOU DON'T WANT TO. MAKE SURE THAT ANY NAME YOU USE IS A NAME ON THE LIST WE GAVE YOU.

1. ________________________________________

2. ________________________________________

3. ________________________________________

4. ________________________________________

NOW LIST THE NAMES OF THE BOYS YOU DON'T LIKE TO SPEND TIME WITH OR PLAY WITH. LIST AS MANY OR AS FEW AS YOU WANT. YOU DON'T HAVE TO LIST ANY IF YOU DON'T WANT TO. MAKE SURE THAT ANY NAMES YOU USE ARE ON THE LIST WE GAVE YOU.

1. ________________________________________

2. ________________________________________

3. ________________________________________

4. ________________________________________
Appendix E

Bukowski Friendship Quality Scale
FRIENDSHIP ACTIVITY QUESTIONNAIRE

Put the name of your very best friend here ____________________________.

Now we want to ask some questions just about you and the person you think of as your best friend so we can know what your best friend is like. We have some sentences that we would like you to read. Please tell us whether this sentence describes your friendship or not. Some of the sentences might be really true for your friendship while other sentences might be not very true for your friendship. We simply want you to read the sentence and tell us how true the sentence is for your friendship. Remember, there are no right or wrong ways to answer these questions.

After each sentence there is a scale that goes from 1 to 5. A "1" means the sentence is not true for your friendship, a "2" means that it is probably not true, a "3" means that it is probably true, a "4" means that it is usually true, and a "5" means that it is really true for your friendship. Circle the number on the scale that is best for you. Be sure to read carefully and answer as honestly as possible.

Examples

X1. If I told my friend a secret I could trust her not to tell anyone else.
   Not True  Really True
   1------2-----3------4------5

X2. If I have a problem at school or at home I can talk to my friend about it.
   Not True  Really True
   1------2-----3------4------5

1. My friend and I spend all our free time together.
   Not True  Really True
   1------2-----3------4------5

2. If I felt sad or upset my friend would try to cheer me up.
   Not True  Really True
   1------2-----3------4------5

3. If I were picking partners at school my friend and I would try to pick each other.
   Not True  Really True
   1------2-----3------4------5

4. If my friend got something new she would share it with me.
   Not True  Really True
   1------2-----3------4------5

5. Even if my friend and I have an argument we would still be able to be friends with each other.
   Not True  Really True
   1------2-----3------4------5

6. My friend and I play together at recess.
   Not True  Really True
   1------2-----3------4------5

7. If other kids were bothering me my friend would help me.
   Not True  Really True
   1------2-----3------4------5

8. Our friendship is just as important to me as it is to my friend.
   Not True  Really True
   1------2-----3------4------5
9. My friend thinks of fun things for us to do together.
10. My friend helps me when I am having trouble with something.
11. If my friend had to move away I would miss her.
12. My friend knows and cares about how I feel and what I like.
13. Sometimes it seems that I care more about our friendship than my friend does.
14. When I do a good job at something my friend is happy for me.
15. There is nothing that would stop my friend and I from being friends.
16. Sometimes my friend does things for me or makes me feel special.
17. When my friend and I have an argument, she can hurt my feelings.
18. My friend decides to do things with other kids instead of with me.
19. If I needed help with something I would ask my friend to help me and she would be willing to help me.
20. I can get into fights with my friend.
21. My friend would stick up for me if another kid was causing me trouble.
22. I would feel ok about telling my friend things I wouldn't tell other kids.
23. When I have something fun to do I want my friend with me.
24. My friend can bug me or annoy me even though I ask her not to.
25. If I forgot my lunch or needed a little money my friend would loan it to me.

Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
Not True
1------2------3-------4-------5
26. I think of things for us to do more often than my friend does.

27. If I said I was sorry after I had a fight with my friend she would still stay mad at me.

28. If I got a bad grade at school I could tell my friend about it and she would not hold it against me.

29. My friend and I go to each other's houses after school and on weekends.

30. Sometimes my friend and I just sit around and talk about things like school, sports, and other things we like.

31. If my friend had something fun to do with someone she would choose to do it with me.

32. No matter what we do together my friend and I can have a good time.

33. It is just sort of natural for me and my friend to do things together.

34. My friend would help me if I needed it.

35. In general my friend and I help each other.

36. If there is something bothering me I can tell my friend about it even if it is something I can not tell to other people.

37. Even if things were going bad for me my friend would stick with me.

38. My friend puts our friendship ahead of other things.

39. When I have to do something that is hard I can count on my friend for help.

40. If my friend or I do something that bothers the other one of us we can make up easily.

41. My friend and I can argue a lot.
42. My friend and I disagree about many things.

43. If my friend and I have a fight or argument we can say "I'm sorry" and everything will be alright.

44. I feel happy when I am with my friend.

45. My friend makes me feel really good.

46. I think about my friend even when my friend is not around.

47. Being friends together is more important to me than it is to my friend.
Appendix F

Perceived Competence Scale for Children
# What I Am Like

<table>
<thead>
<tr>
<th>REALLY TRUE for me</th>
<th>SORT OF TRUE for me</th>
<th>SAMPLE ITEMS</th>
<th>SORT OF TRUE for me</th>
<th>REALLY TRUE for me</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td>I would rather play outdoors in my spare time</td>
<td>OR</td>
<td>I would rather watch T.V. in my spare time.</td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td>I never worry about anything</td>
<td>OR</td>
<td>I sometimes worry about certain things.</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td>I feel that I am very good at my school work</td>
<td>OR</td>
<td>I worry about whether I can do my school work.</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>I find it hard to make friends</td>
<td>OR</td>
<td>For me it's pretty easy to make friends.</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>I do very well at all kinds of sports</td>
<td>OR</td>
<td>I don't feel that I am very good when it comes to sports.</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>I feel that there are a lot of things about myself that I would change if I could</td>
<td>OR</td>
<td>I would like to stay pretty much the same.</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>I feel like I am just as smart as other kids my age</td>
<td>OR</td>
<td>I am not so sure and I wonder if I am as smart as the other kids my age.</td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td>I have many friends.</td>
<td>OR</td>
<td>I don't have very many friends.</td>
</tr>
</tbody>
</table>
7. [X] [X] I wish I could be a lot better at sports OR I feel I am good enough at sports.

8. [X] [X] I am pretty sure of myself OR I am not very sure of myself.

9. [X] [X] I am slow in finishing my school work. OR I can do my school work quickly.

10. [X] [X] I don’t think I am a very important member of my class OR I think I am a pretty important member of my class.

11. [X] [X] I think I could do well at just about any new outdoor activity. OR I am afraid I might not do well at new outdoor activities.

12. [X] [X] I feel good about the way I act OR I wish I acted differently.

13. [X] [X] I often forget what I learn OR I can remember things easily.

14. [X] [X] I am always doing things with a lot of kids OR I usually do things by myself.

15. [X] [X] In sports, I feel that I can play better than other students my age. OR In sports, I don’t feel I can play as well as other students my age.

16. [X] [X] I think that maybe I am not a very good person. OR I am pretty sure that I am a good person.
<table>
<thead>
<tr>
<th></th>
<th>REALLY TRUE</th>
<th>SORT OF TRUE</th>
<th></th>
<th>REALLY TRUE</th>
<th>SORT OF TRUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td></td>
<td>I like school because I do well in class</td>
<td>OR</td>
<td></td>
<td>I don't like school because I am not doing very well in class.</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>I wish that more kids liked me</td>
<td>OR</td>
<td></td>
<td>I feel that most kids do like me.</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>In most games and sports I usually watch instead of play</td>
<td>OR</td>
<td></td>
<td>I usually play, rather than just watch in games and sports.</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>I am very happy being the way I am</td>
<td>OR</td>
<td></td>
<td>I wish I was different.</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>I wish it was easier to understand what I read</td>
<td>OR</td>
<td></td>
<td>I don't have any trouble understanding what I read.</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>I am popular with others my age</td>
<td>OR</td>
<td></td>
<td>I am not very popular with others my age.</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>I don't do well at new outdoor games</td>
<td>OR</td>
<td></td>
<td>I am good at new outdoor games right away.</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>I am not very happy with the way I do a lot of things</td>
<td>OR</td>
<td></td>
<td>I think the way I do a lot of things is fine.</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>I have trouble figuring out the answers in school</td>
<td>OR</td>
<td></td>
<td>I almost always can figure out the answers in school.</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>I am really easy to like</td>
<td>OR</td>
<td></td>
<td>I can be kind of hard to like.</td>
</tr>
<tr>
<td></td>
<td>REALLY TRUE for me</td>
<td>SORT OF TRUE for me</td>
<td>I am among the last to be chosen for games</td>
<td>OR</td>
<td>I am usually chosen first for games.</td>
</tr>
<tr>
<td>---</td>
<td>-------------------</td>
<td>---------------------</td>
<td>------------------------------------------</td>
<td>----</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>27.</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
<td></td>
<td>[ ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I am usually sure that what I am doing is the right thing</th>
<th>OR</th>
<th>I am not so sure if what I am doing is the right thing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>
Appendix G

Family Adaptability and Cohesion Scale
FAMILY INTERACTION SCALE

On these pages we have listed 30 sentences that say something about how the members of your family might interact with each other. We want to know whether these sentences describe your family. Read each sentence and using the following guide, circle the number that indicates if the sentence describes your family. There are no right or wrong answers to any of these questions, & keep in mind that we will protect the confidentiality of your answers.

1 = almost never
2 = once in a while
3 = sometimes
4 = frequently
5 = almost always

1. Family members are supportive of each other during difficult times.
   Almost never  Almost always
   1---2---3---4---5

2. In our family, it is easy for everyone to express his/her opinion.
   Almost never  Almost always
   1---2---3---4---5

3. It is easier to discuss problems with people outside the family than with other family members.
   Almost never  Almost always
   1---2---3---4---5

4. Each family member has input in major family decisions.
   Almost never  Almost always
   1---2---3---4---5

5. Our family gathers together in the same room.
   Almost never  Almost always
   1---2---3---4---5

6. Children have a say in their discipline.
   Almost never  Almost always
   1---2---3---4---5

7. Our family does things together.
   Almost never  Almost always
   1---2---3---4---5

8. Family members discuss problems and feel good about solutions.
   Almost never  Almost always
   1---2---3---4---5

9. In our family, everyone goes their own way.
   Almost never  Almost always
   1---2---3---4---5
10. We shift household responsibilities from person to person.  
   Almost never  Almost always
   1—2—3—4—5

11. Family members know each other's close friends.  
   Almost never  Almost always
   1—2—3—4—5

12. It is hard to know what the rules are in our family.  
   Almost never  Almost always
   1—2—3—4—5

13. Family members consult other family members on their decisions.  
   Almost never  Almost always
   1—2—3—4—5

14. Family members say what they want.  
   Almost never  Almost always
   1—2—3—4—5

15. We have difficulty thinking of things to do as a family.  
   Almost never  Almost always
   1—2—3—4—5

16. In solving problems, the children's suggestions are followed.  
   Almost never  Almost always
   1—2—3—4—5

17. Family members feel very close to each other.  
   Almost never  Almost always
   1—2—3—4—5

18. Discipline is fair in our family.  
   Almost never  Almost always
   1—2—3—4—5

19. Family members feel closer to people outside the family than to other family members.  
   Almost never  Almost always
   1—2—3—4—5

20. Our family tries new ways of dealing with problems.  
   Almost never  Almost always
   1—2—3—4—5

21. Family members go along with what the family decides to do.  
   Almost never  Almost always
   1—2—3—4—5

22. In our family, everyone shares responsibilities.  
   Almost never  Almost always
   1—2—3—4—5

23. Family members like to spend their free time with each other.  
   Almost never  Almost always
   1—2—3—4—5
24. It is difficult to get a rule changed in our family.

Almost never  Almost always
1------2------3------4------5

25. Family members avoid each other at home.

Almost never  Almost always
1------2------3------4------5

26. When problems rise, we compromise.

Almost never  Almost always
1------2------3------4------5

27. We approve of each other's friends.

Almost never  Almost always
1------2------3------4------5

28. Family members are afraid to say what is on their minds.

Almost never  Almost always
1------2------3------4------5

29. Family members pair up rather than do things as a family.

Almost never  Almost always
1------2------3------4------5

30. Family members share interests and hobbies with each other.

Almost never  Almost always
1------2------3------4------5