

## **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.

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

**UMI<sup>®</sup>**



**Parenting style, moral development and friendship:  
(How) do we choose our friends?**

**Richard Miners**

**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**

**August 2001**

**© Richard L. Miners, 2001**



**National Library  
of Canada**

**Acquisitions and  
Bibliographic Services**

**395 Wellington Street  
Ottawa ON K1A 0N4  
Canada**

**Bibliothèque nationale  
du Canada**

**Acquisitions et  
services bibliographiques**

**395, rue Wellington  
Ottawa ON K1A 0N4  
Canada**

*Your file Votre référence*

*Our file Notre référence*

**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.**

**0-612-64020-5**

**Canada**

## Abstract

Parenting style, moral development and friendship: (How) do we choose our friends?

Richard Miners

Parenting, morality, and friendship may be interrelated in the area of interpersonal attraction. Friend selection has been argued to occur on the basis of similar moral development. Research indicates that different parenting styles lead to differing levels of moral development. This study examined the impact of parenting style on moral development and investigated whether children befriend similarly morally developed others who have experienced similar parenting styles. Questionnaires were given to 120 children (mean age = 11.2 years), who identified friends, nominated morally-oriented peers, rated responses to moral dilemmas, and rated the emotional climate of their homes. Findings indicated that: (a) *justice* and *care* vary significantly across parenting styles; (b) girls endorse *conventional* more than *preconventional* responses to moral dilemmas; (c) boys who perceive their parents as low in warmth and control and the friends of these boys endorse *preconventional* more than *conventional* responses; (d) girls who perceive their parents as low-warmth/high-control befriend girls who are more *just* than the friends of other girls; (e) girls who perceive their parents as low in warmth and control befriend girls who are more caring than the friends of other girls; (f) parental control ratings by children and their friends are positively related; and (g) parental warmth ratings by children and their friends are negatively associated. These findings suggest that adolescent friend selection may rely upon the *similarity* of certain friend characteristics, while upon the *complementarity* of others.

## Acknowledgements

I would like to thank the many people who made this study possible. First, I would like to thank the principals of the schools which participated in the study: Mrs. Anne Poland and Mrs. Carole Léger. They offered generously of their own time and were instrumental in garnering the support of staff and the participation of students. I owe my thanks as well to two individuals, Lorrie Sippola and Nancy Darling, who graciously offered their measures for use in this study. I would also like to extend my sincere appreciation to Dr. William Bukowski who was forever available throughout the production of this thesis. Many an evening of his time with his family was generously foregone to advance the more difficult sections of the thesis. Bill was instrumental in the many stages of preparation of the thesis – he acted as an experienced sounding-board, through which elusive concepts became clear and served as an important presence in every aspect of data collection.

Other individuals to whom I owe my gratitude are Tanya Bergevin, who was helpful at every step of the way, Jonathon Santos, who was instrumental to data collection and data collation. Two other labmates to whom I am indebted are Derek Letinsky and Melissa Bergevin, who gave generously of their time and energy to make data collection and collation flow smoothly.

I would also like to thank my family and friends (you know who you are!) who were there to encourage me and who were understanding of my busy schedule while completing this work. Your support has made all the difference. And, lastly, thank you, Juan Valdez, for keeping me awake into the wee hours.

## **Dedication**

**To B.C. for everything along the way. Without your inspiration,  
none of this would have been possible.**

## Table of Contents

Introduction .....	1
Friendship .....	2
Moral Development .....	6
Parenting Styles .....	10
Research Hypotheses .....	17
Method .....	20
Participants .....	20
Procedure .....	20
Materials .....	21
Results .....	26
Analyses of Participant Variables .....	27
Analyses of Participants and their Friends .....	43
Discussion .....	71
References .....	92
Appendices .....	98



## List of Tables

Table 1.	Intercorrelations between standardized participant parenting style subscales .....	29
Table 2.	Intercorrelations between participant standardized moral orientation quality and standardized moral orientation level subscales .....	30
Table 3.	Correlation coefficients between standardized participant parenting style subscales and standardized participant moral orientation subscales .....	31
Table 4.	Standardized justice and care scores as a function of parenting group .....	33
Table 5.	Findings from analysis of variance of moral orientation quality as a function of parenting style and sex and findings from follow-up tests .....	35
Table 6.	Preconventional and conventional moral orientation scores as a function of sex and parenting group .....	38
Table 7.	Findings from analyses of variance of moral orientation level as a function of parenting group and sex and findings from follow-up tests .....	40
Table 8.	Correlation coefficients between standardized participant parenting style subscales and standardized parenting style subscales of nominated classmates as a function of friendship condition .....	45
Table 9.	Correlation coefficients between standardized participant moral orientation subscales and standardized moral orientation subscales of nominated classmates as a function of friendship condition .....	47
Table 10.	Standardized moral orientation quality scores of participants' Friends as a function of participant sex and participant parenting group .....	50

<b>Table 11.</b>	<b>Findings from analysis of variance of participant friends' Moral orientation quality as a function of participant parenting group, participant sex, and friendship condition and findings from follow-up tests .....</b>	<b>52</b>
<b>Table 12.</b>	<b>Standardized moral orientation level scores of participants' Friends as a function of participant sex and participant parenting group .....</b>	<b>58</b>
<b>Table 13.</b>	<b>Findings from analysis of variance of participant friends' Moral orientation level (preconventional, conventional) as a function of participant parenting group, participant sex and friendship condition and findings from follow-up tests .....</b>	<b>60</b>
<b>Table 14.</b>	<b>Standardized parenting style subscale scores of participants' Friends as a function of participant sex and participant parenting group .....</b>	<b>64</b>

## List of Figures

Figure 1.	Standardized justice and care scores as a function of parenting group ....	34
Figure 2.	Moral orientation scores as a function of sex and parenting group .....	39
Figure 3.	Standardized moral orientation quality scores of participants' friends as a function of participant sex and participant parenting group .....	51
Figure 4.	Standardized moral orientation level scores of participants' friends as a function of participant sex and participant parenting group .....	59
Figure 5.	Standardized parental control of participants' friends as a function of participant sex and participant parenting group .....	65
Figure 6.	Standardized parental warmth of participants' friends as a function of participant sex and participant parenting group .....	66
Figure 7.	Standardized parental psychological autonomy-granting scores of participants' friends as a function of participant sex and participant parenting group .....	67

## Parenting style, moral development and friendship:

(How) do we choose our friends?

Developmental psychologists have often studied parenting, peer relations, and moral development as though they were independent domains of experience. The goal of the current study is to investigate the extent to which particular aspects of these domains relate to each other. Specifically, this study focuses on the ways that family experiences are related to children's moral development and to their selections of friends. The basic argument of this thesis is that moral development is a mediating factor between family experience and friendship. By integrating the family, peer and moral domains it may be possible to identify one of the ways by which moral development can be both a consequence and an antecedent of experiences in relationships. That is, it is argued that parenting style influences the moral development of children, and that moral development influences friend choice.

Children raised in keeping with particular parenting styles have, in fact, been found to be at a higher level of moral development than peers raised in accordance with other parenting styles (Damon, 1977; Rubin, Bukowski, & Parker, 1998). There is also evidence that children are attracted to others who are similar to them (Byrne & Griffitt, 1973). One basis for a child's judgements of similarity is the behaviours of other children; a child may choose friends whose behaviour is similar to their own, including behaviours that demonstrate a specific, and similar, level of moral development. Thus, it is argued that, due to the differential levels of moral development expected across children raised according to different parenting styles, children may be more likely to befriend similarly

raised children. In this respect, the aspects of parenting style which characterize the emotional climate of children's homes (e.g., control, warmth) are expected to be similar for friends.

In order to ascertain the validity of this model, the constructs in question will be defined as follows. Parenting style will be defined according to Baumrind's (1978) theory. The level of moral development of children will be evaluated according to: (a) Kohlberg's (1963) model of *justice* considerations; and (b) Gilligan's (1982) model of *care* injunctions. Friendship will be determined on the basis of the presence or absence of mutual nominations of friendship, as indicated below. In order to elucidate the intersection between parenting style, moral development and friendship, the introduction of the paper is organized as follows. The first section opens with an overview of the literature related to friendship and is followed by a section on children's moral development. Finally, a section on parenting style will be outlined.

### Friendship

The study of friendship has long been of interest to philosophers and psychologists alike (Aristotle, 1998; Blum, 1980). According to contemporary paradigms, friendship is understood as being an integral part of a broader framework of social relationships referred to as the peer domain. Within the peer domain, two levels of social complexity have been identified, group and dyadic relationships, which are reciprocally engaged and together act upon the individual (Bukowski & Hoza, 1989; Byrne & Griffitt, 1973; Rubin et al., 1998). At the group level, the child's affiliation with the group (i.e., popularity) is determined from the degree of acceptance and rejection attributed to him or

her by peers. Several studies have demonstrated the psychosocial benefits of popularity at the group level (Hartup, 1996; Bukowski & Hoza, 1989). Although, the group level of social complexity plays an important role in children's psychosocial development, the focus of this study is on the dyadic level. Thus, popularity will not be discussed further herein.

In addition to the benefits afforded by popularity, children have been found to derive further benefits from their interactions at the dyadic level of social complexity. Central to this level of social complexity is friendship, which is defined as a dyadic relationship based upon voluntariness, reciprocity and affective bond (Bukowski, Newcomb, & Hartup, 1996; Bukowski, Sippola, Hoza & Newcomb, 1994). Research has revealed that friendship confers unique benefits such as interpersonal understanding, empathy, feelings of self-worth (Bukowski et al., 1996; Bukowski et al., 1994), resiliency and strength (Bagwell, Newcomb & Bukowski, 1998), protective buffering from environmental stressors (Sullivan, 1953), and social competence (Berndt, 1982; Bukowski & Hoza, 1989). Thus, the psychosocial development of children appears to be fostered in a number of ways as a result of friendship experiences.

Whereas many children derive benefits from their friendships, it appears that this does not apply to all children. Studies of antisocial children suggest that they may lack the necessary social skills to engage in positive, stable friendships (Coie & Dodge, 1998). Findings indicate that, in contrast to the friendships of prosocial children, friendships among antisocial friends are more contentious (Berndt, 1982) and may exacerbate any problems the children may have had prior to the friendship (Shantz, 1986). Antisocial

children may, therefore, not only not derive the same benefits from their friendships as prosocial children do, but also have friendships which lead to greater social maladjustment.

In light of the marked effects of friendship upon the psychosocial development of children, research efforts have been directed toward determining whom children are likely to befriend. Extant theory, much of which is based on the idea that children choose friends who are similar to themselves, suggests that it is possible to predict the social orientation (prosocial, antisocial) of children's friends. Byrne & Griffitt's (1973) similarity-attraction hypothesis proposes that it is possible to predict who children will befriend, because friendship is based largely upon the similarity of interests and the fulfilment of needs. Needs are fulfilled through the tendency of children to select friends that resemble themselves (Hartup & Stevens, 1997; Kandel, 1978a, 1978b). Further, Hartup (1996) argues that children gauge similarity based upon reputationally-salient behaviours, which may be classified as prosocially- or antisocially-oriented. Accordingly, prosocial and antisocial children tend to befriend other similarly prosocial or antisocial individuals.

In addition to the influence of social orientation upon friend selection, the psychosocial development of children may affect the quality of their friendships as well. Studies examining of the developmental trajectories of children's friendship conceptions indicate that while nearly all young children report that pleasurable companionship is a feature of their friendships, it is only as children grow older that they emphasize the importance of social ideals such as loyalty and authenticity in their friendship (Bigelow,

1977; Rubin et al., 1998). Several researchers have endeavoured to understand why older children are more likely to endorse value-related ideals (e.g., justice, care) in their conceptions of friendship (Damon, 1977; Rubin et al., 1998; Sullivan, 1953). In brief, it appears that as they grow older, children develop psychologically due to a combination of social and cognitive factors (Lewin, as cited in Rubin et al., 1998). Their needs and conceptions about social interaction have, therefore, been argued to follow a developmental trajectory that reflects their underlying psychological development. Thus, children are thought to pass through several developmental stages in a unidirectional, hierarchical, and non-reversible manner, reflecting the qualitative differences of their conceptions of social interactions at each stage.

Although individual variation in the rate at which children progress through developmental stages may exist, children of normative development are argued to pass through three stages in their conceptions of friendship (Bigelow, 1977). The average 7 to 8-year-old is at the *reward-cost stage*, wherein friends are considered rewarding individuals to be with and non-friends as difficult or uninteresting to be with. At 10 to 11 years of age, children go through the *normative stage*, during which shared rules and values become important, and friends are expected to stand up for each other. Children in this stage use psychological characteristics (e.g., trustworthiness, helpfulness) to distinguish friends from other peers and emphasize concrete or material exchanges, such as physical helpfulness or kindness, to characterize their friendships. By 11 to 13 years of age, children enter the *empathic stage* in which friends are observed to engage in self-disclosure as a means of coming to know one another. During this stage, children are also



reported to perceive friends as people they can count on for understanding and intimate social support (Bukowski, Newcomb & Hoza, 1987; Rubin et al., 1998).

In sum, studies of friendship emphasize the influence of dyadic relationships within the peer domain upon children. Whether this influence is beneficial or detrimental appears to depend upon the child's social orientation and psychosocial development, and the characteristics of the child's friends. In addition to social orientation and psychosocial development, other factors appear relevant to the prediction of the individuals that children befriend. Among the more important of these factors may be the moral development of the child. Bukowski and Sippola (1996) suggest that in order to engage in "morally excellent" friendship, children and their friends require an awareness of virtue-related ideals. Prior to examining the role of moral development upon the quality of friendships, the literature on moral development will first be reviewed.

### Moral Development

In order to assess the role of morality upon friendship, it is important to first consider the writings which have led to contemporary theories. According to Turiel (1998), the late 1950s and early 1960s saw the re-emergence of scholarly interest centred upon the child-rearing antecedents of moral values and morality. In 1963, Lawrence Kohlberg published his theory of moral development. Based on the prior arguments of Piaget (1932), Kohlberg concluded that parental disciplinary practices were a principal means of instilling moral behaviour in very young children. Moreover, he also asserted that children act morally due to a spontaneous interest in helping others as a part of their emerging ability to take the perspective of others (Kohlberg, 1969). He argued that by the

time children reach the stage of concrete operations, however, morality has become a form of individual construction in which children are responsive to social conventions. In this respect, Kohlberg saw the parent-child relationship not as a forum in which moral development is inculcated through strict discipline, but as one in which moral development is engendered by both parental example and children's cognitive and psychosocial development.

In addition to redefining the way in which parents were thought to influence their children's moral development, Kohlberg proposed that certain processes underlie moral development. Kohlberg and Diessner (1991) suggested that two elements are central to moral development. First, the following basic conditions for sociomoral interaction must be present: (a) exposure to internal cognitive moral conflict, (b) exposure to disagreements between people, and (c) role-taking opportunities. The second element, referred to as "moral attachment", involves the processes of basic imitation and perceived likeness to persons with whom the child has formed a close relationship. Although other individuals may foster moral development in the child (Hart & Atkins, 1998), Kohlberg was referring specifically to children's imitation of their parents.

In addition to specifying the elements necessary to promote moral development, Kohlberg described moral development in terms of a progression through six stages of moral judgement (Kohlberg, 1963). Stages 1 and 2 were grouped together at the *preconventional* level of moral judgement. Individuals at this level were argued to form judgements based primarily upon obedience, the avoidance of punishment, and instrumental needs and exchange. Individuals at this level are argued to seek out their

friends on the basis of pleasure and, in this respect, their friendships appear to mirror Bigelow's (1977) notion of the reward-cost stage of friendship conceptions.

Stages 3 and 4 of Kohlberg's (1963) model of moral development are grouped together under the *conventional* level. At this level, moral judgements are based on role obligations, stereotypical conceptions of good persons, and respect for rules and authority. The moral development of individuals at this level has progressed sufficiently for them to conceive of their friendships in a manner consistent with Bigelow's (1977) normative stage. At the conventional level, however, individuals may also be at a stage of moral development in which they are able to endorse friendship conceptions consistent with Bigelow's empathic stage. Bigelow posited that children may attain the empathic stage as early as 11 years of age. This age of onset is in contrast with the earliest onset of Kohlberg's advanced level of moral judgement (the postconventional level), which he argued begins only in late adolescence. An individual may, therefore, be able to experience empathy well before the emergence of postconventional moral judgement.

The fifth and sixth stages of Kohlberg's (1963) model of moral judgement were ascribed to the *postconventional* level. At this level, moral judgements were argued to be based on contractual agreements, established arrangements for settling conflicts, mutual respect and differentiated concepts of justice and rights. Because the focus of this study is on preadolescents, however, postconventional moral judgement is unlikely to have been achieved by participants and consequently will not be considered further in this study.

While Kohlberg's conceptualization of moral development was influential, it was challenged by Carol Gilligan who argued that an emphasis on concepts such as justice

overlooked the importance of nurturance-based phenomena such as care. Gilligan (1982) argued that this weakness in Kohlberg's model was especially problematic as it appeared to underestimate the moral development of women who, she argued, are more likely to adopt a care orientation toward moral problems than an orientation based on justice. According to Gilligan, two moral injunctions exist: not to treat others unfairly (justice), and to not turn away from someone in need (care).

Gilligan (1982) argued that for men, conceptualizations of the moral domain are tied to justice and autonomy, and moral development is viewed in terms of changes in the logic of equality and reciprocity. For women, however, these conceptualizations were argued to be linked to care and responsibility in relationships, and moral development is formulated mainly in terms of changes in the understanding of responsibility and relationships. Thus, Gilligan highlighted the qualitative aspects of morality (e.g., justice and care) and proposed sex differences in the conceptualization of morality. In sum, Gilligan argued that moral development may be conceived of in terms of two conceptual frameworks: justice considerations and care injunctions. When combined, these frameworks were argued to provide a means of determining the overall stage of moral development of the individual.

In light of these theories of moral development, it is possible that inasmuch as individuals' morality may be reflective of how they judge the appropriateness of their own behaviours in relation to others, morality may also serve as a basis for judgement of the appropriateness of others' behaviours. In this respect, it appears that as children develop morally they may re-evaluate their existing friendships -- maintaining, modifying

or terminating them -- and seek out new peers who embody the values that they have come to believe are important. Insofar as friendship is based upon similarity, it follows that both of the children involved in a friendship are likely to strive toward the same values that motivate the selection of the friend. In this way, it is argued that friends are likely to share a similar level of moral development and to select each other as friends on that basis.

Although the development of theories and measurement methodologies to determine the level of moral development of individuals has been one focus of the literature on morality, another focus of morality-related research has been the examination of which factors in the child's environment contribute to moral development. One of the more central of these factors is the parenting style used in the child's home.

### Parenting styles

Due to the proportion of time that young children spend in the presence of their parents, it seems logical to conclude that the early family environment has a marked influence on their lives. Through interactions with their parents, children become aware of the consequences of their actions and of others' expectations of them. This early socialization process, therefore, appears to be a means by which children come to internalize a sense of what is right and of what is wrong -- that is, a sense of morality.

This sense of morality, however, has not been found to develop at equal rates in all children (Damon, 1977; Rubin et al., 1998). An important moderator of the rate of moral development of children appears to be parent-child interaction patterns (Boyes &

Allen, 1993). Boyes and Allen observed that, "... the moral atmosphere of the home clearly influences the rate of children's moral reasoning development" (p. 552). Moreover, moral development has been found to be most promoted when the perspectives and treatment of all members of a group (e.g., family members) are valued and promoted (Kohlberg, 1976, 1985). As such, the manner in which parents respond to their children, referred to by Baumrind (1978) as *parenting style*, has been found to moderate the rate of moral development in children.

Theories of moral development (Kohlberg, 1969; Piaget, 1932) have also attributed a central role to reasoning (judgement) in the development of morality. It was posited that to promote the moral development of children, they must be exposed to higher levels of moral reasoning and to experiences of cognitive conflict. These experiences are thought to challenge current ways of thinking, and thereby stimulating development toward a more advanced stage of moral development. Empirical support for the contention that cognitive conflict leads to moral developmental has, in fact, been found (Walker, 1988).

Exposure to higher levels of moral reasoning, brought about through parental discipline and moral education of their children, has been examined to determine its actual impact upon moral development. From an examination of these studies, Hoffman (1970) and Maccoby and Martin (1983) identified three parental behaviours which were examined alongside measures of children's moral reasoning. The first of these behaviours, *power assertion*, primarily involves physical punishment, threats of the use of force, and the removal of privileges or goods. The second, *love withdrawal*, is manifested

through disapproval and other expressions of removal of emotional support or affection. The third parental behaviour is referred to as *induction*, which consists of the provision of a rationale for parental decisions and is directed toward helping children to modify their behaviour on the basis of concern for the welfare of others. Due to the instructive nature of induction, the moral development of children whose behaviour is modified in this manner (versus those raised by parents resorting to power assertion or love withdrawal practices) are argued to experience more rapid moral development and thereby become more morally developed in comparison to their same-aged peers. Research has, in fact, demonstrated a positive relation between parent's use of *induction* and levels of moral reasoning in children (Azrak, 1978; Hoffman & Saltzstein, 1967). In order to describe which families are more likely to foster moral development on the basis of induction, however, one must first consider a means of categorizing families according to qualitative differences such as the parental behaviours mentioned above.

One means of categorizing families on the basis of qualitative differences was that proposed by Baumrind (1978). According to this model, there are two critical dimensions of parents' behaviour toward their children: *parental responsiveness* (warmth) and *parental demandingness* (control). *Responsiveness* refers to the degree to which parents respond to the needs of the child in an accepting and supportive manner. *Demandingness* points to the extent to which parents expect mature, responsible behaviour from their children. The extent to which parents are responsive and demanding varies from one family to the next. For example, while some parents may be very controlling of their children and offer little in the way of warmth, other parents may be responsive and

supporting, and expect very little of their children.

As parental responsiveness and parental demandingness are largely independent dimensions of parenting, it is possible to look at combinations of these two dimensions. The levels of responsiveness and demandingness of parents may be characterized as either high or low. As such, four possible combinations of these two dimensions are possible and are known as the *authoritative*, *authoritarian*, *indulgent* and *neglectful* parenting styles.

*Authoritative parents* are high on responsiveness and demandingness. These parents value both instrumental and expressive attributes (e.g., discipline conformity and autonomous self-will), yet they assume ultimate responsibility for the behaviour of their children. They are mindful of their own rights and also acknowledge their children's idiosyncratic ways. Authoritative parents set clear standards of behaviour which take into account the developing capabilities and needs of the child. They guide their children's activities firmly and consistently and require them to participate in the functioning of the household by helping out with chores. When dealing with issues of discipline, authoritative parents engage their children in dialogue in a rational, issue-oriented manner. Moreover, authoritative parents are considered warm and responsive to the needs of their children. They are affectively responsive by being loving, committed and supportive. Furthermore, they are cognitively responsive by providing a stimulating and challenging home environment.

*Authoritarian parents* are high on demandingness and low on responsiveness. They value obedience and favour punitive, forceful means (e.g., the use of power



assertion) to curb the self-will of their children. They attempt to shape, control, and evaluate the behaviour and attitudes of the child in accordance with a set and absolute standard of conduct. Authoritarian parents attempt to inculcate conventional values such as work, respect for authority and the preservation of order and traditional structure. Because these parents believe that their offspring should accept their rules and expectations without question, they do not encourage verbal give-and-take on discipline-related matters. This approach ultimately does not foster their children's autonomy, but instead restricts independent behaviour.

*Indulgent (permissive) parents* are high on responsiveness, but low on demandingness. These parents interact with their children in a benign and passive manner, avoiding the use of power when dealing with issues of discipline. They view themselves as resources available to their children, which the children may or may not choose to use. Indulgent parents are likely to view discipline as an infringement upon the freedom of their offspring, which they believe impinges upon their healthy development. Consequently, these parents attempt to behave in a non-punitive, accepting, and affirmative manner toward their children's impulses, desires and actions. In sum, indulgent parents make few maturity demands on the children's behaviour and allow them a high degree of autonomy.

*Neglectful (Indifferent) parents* are low on responsiveness and demandingness. Neglectful parents attempt to minimize the amount of energy and time needed to raise their children. They know little about their children's lives, interact little with them and do not include them in making decisions that affect the family. Whereas parents of the other

types espouse a set of beliefs oriented toward the healthy development of their children, the concerns of neglectful parents are primarily parent-centred. That is, they structure their home lives around their own needs and interests.

This method of categorizing families proposed by Baumrind (1978) is important for a number of reasons. First, parenting style has been found to be associated with a number of markers of psychosocial development. One of the more prominent of these markers is social competence. Children from authoritative homes have been found to be more socially competent than their peers raised in authoritarian, indulgent or neglectful environments (Baumrind, 1988). In addition to their more developed social skills, children from authoritative households are more self-reliant, more self-controlled, more responsible, more creative, more intellectually curious, more adaptive and more successful in school. In contrast, children from authoritarian households are less socially skilled, less self-assured, less curious, more dependent and more passive. Children from indulgent homes tend to be less mature, less responsible, more easily influenced by their peers and less able to take on leadership roles. Finally, children from neglectful homes are often impulsive and more likely to be involved in delinquent behaviours such as precocious experimentation with sex, alcohol and drugs (Baumrind, 1967; Fuligni & Eccles, 1993; Lamborn, Mounts, Steinberg & Dornbush, 1991; Steinberg, Lamborn, Darling, Mounts and Dornbush, 1994). Although exceptions to these widely applicable patterns exist, the majority of studies indicate that authoritative parenting is strongly linked with healthy adolescent development for a wide range of ethnicities and socioeconomic backgrounds (Maccoby & Martin, 1983; Steinberg et al., 1991).

In an effort to understand why authoritative parenting leads to more healthy development and adaptation among adolescents, researchers endeavoured to tease apart the main elements of parenting style (Steinberg, 1990). Consensus among the majority of researchers indicates that there are three main elements of any parenting style: *warmth*, *structure* and *autonomy support*. The first of these is related to the responsiveness dimension, whereas the latter two are related to demandingness. Warmth has been found to be associated with overall competence. Structure has been found to be associated with the presence of fewer behavioural problems. Autonomy support, which denotes the degree to which parents encourage the individuality and independence of their children, is associated with fewer symptoms of psychological distress such as depression or anxiety (Barber, Olsen, & Shagle, 1994; Steinberg, 1990).

In terms of the elements of parenting style, several factors may explain why the authoritative parenting style is so strongly associated with healthy adolescent development. First, authoritative parents provide an appropriate balance between restrictiveness and autonomy. This balance encompasses both standards and limits for children's behaviour -- which are argued to be needed by developing individuals -- and the flexibility necessary to allow children opportunities to develop self-reliance. Second, authoritative parents are more likely to nurture the moral development of their children by engaging them in a verbal give-and-take about rules, expectations and decisions. These discussions help to foster the development of social competence and enhance their children's understanding of social systems and social relationships. Discussions of this type have also been argued to lead to the development of reasoning abilities, empathy and

more advanced moral judgement (Baumrind, 1978). Third, due to the combination of warmth and control used by authoritative parents, children are more likely to identify with their parents. According to Steinberg (1996), "... one of the strongest predictors of identification between children and their parents is warmth in the parent-child relationship" (p. 164). Indeed, evidence suggests that we are more likely to imitate those who treat us with warmth and affection (Hill, 1980). Thus, a number of conceptual links explain why parenting style, and in particular the combination of warmth and control associated with the authoritative parenting style, play such an important role in the development of the child.

### Research Hypotheses

The present study examines the relationship between parenting style (Baumrind, 1978), children's moral development (Kohlberg, 1963; Gilligan, 1982) and friendship choice. Previous studies have found a relation between parenting style and moral development (Boyes & Allen, 1993; Pratt, Arnold, Pratt, Diessner, 1999; Walker & Taylor, 1991). To the author's knowledge, however, no study empirically examines the potentially mediating role of moral development in the relation between parenting style and children's friendship selection. In this respect, the purpose of this study is to investigate whether moral development does indeed mediate the relationship between parenting style and children's friendship selection.

Numerous studies attest to the impact of two social domains upon moral development - the family domain and the peer domain. Whether one of these two domains is more influential to the moral development of children than the other has

become a widely debated topic. The underlying supposition behind the current study is that, while both domains may be influential, early interactions in the family domain set the stage for subsequent interactions within the peer domain. As such, parents first foster moral development in their children by passing their moral values to their children by way of example, or through any number of disciplinary means (e.g., power assertion, love withdrawal, or an inductive approach). Once internalized, this emerging moral framework within children is carried with them into the peer domain where they seek out similar peers as friends.

The particular approach that parents employ to discipline their children (i.e., their parenting style) has been found to differentially influence the moral development of children. The moral development of children is, in turn, believed to be a basis for the selection of friends insofar as moral development is readily observable through other children's morally-oriented behaviours, which children employ in the selection of their friends. Further, these empirical associations have been alluded to in recent writings: "By fostering certain traits in their children, parents essentially direct a child toward a particular peer group, and thus exercise some control over the type of peer group influences to which their child is exposed" (Brown, Mounts, Lamborn & Steinberg, 1993, p.469).

In terms of the first part of the hypothesis, that of the aforementioned association between parenting style (Baumrind, 1978) and moral development, the moral development of children is expected to vary across parenting styles. Specifically, children from authoritative homes, who are exposed to high parental control and high parental

warmth, are expected to be the most morally developed, whereas children from neglectful homes (low-control and low-warmth) are expected to be the least morally developed.

With respect to the second part of the hypothesis, the selection of friends, it is predicted that children will report that they seek out similarly morally developed children for friendship. According to Byrne and Griffitt (1973), children select their friends on the basis of perceived similarities between themselves and other children. Among the bases of perceived similarity that children employ in the selection of friends is the social orientation (prosocial or antisocial) of the child. Moreover, the degree to which a child is prosocial or antisocial is also argued to be an implicit marker of his or her level of moral development. Consequently, it is posited that children will select each other as friends based upon the similarity of their levels of moral development (i.e., the similarity of their moral orientations).

In addition to the similarity that children and their friends may manifest on moral orientation, it is also predicted that, by virtue of the expected association between moral orientation and parenting style, children and their friends will come from homes in which similar parenting styles are employed. Thus, in terms of the dimensions of parenting style (control, warmth, and psychological autonomy-granting), it is expected that children's ratings of the parental control, parental warmth and psychological autonomy granted by their parents will be positively correlated with their friends' ratings of parental control, parental warmth and psychological autonomy granted by their parents.

## Method

## Participants

Participants were recruited through two public primary schools in the Laurentians region of southern Quebec. A sample of 120 children (59 boys and 61 girls) in the fifth ( $n = 69$ ) and sixth ( $n = 51$ ) grades was obtained. Mean age for the sample was 11.20 years with a range between 10 and 13 years. Solicitation letters were sent out to the parents of all eligible students (i.e., all students in grades 5 and 6) and informed consent was obtained. Of the potential pool of participants available, 80% of the children participated (see Appendices A and B for the solicitation letter/ parental permission form and the child consent form, respectively).

## Procedure

Students were met with twice. On the first occasion, the goals and procedures of the study were explained and children were given a letter and parental consent form to take home. The letter outlined the study and informed parents of the rights of participants (e.g., voluntary nature of participation, confidentiality, right to discontinue). A second visit was made to the schools to collect the parental consent forms, to review the rights of participants and to administer the questionnaires. The questionnaires were administered to participants in their homerooms using a group administration procedure. The participants completed a number of paper-and-pencil measures designed to elicit self-report and peer-group perceptions on the following topics: (a) children's same-sex and other-sex friendship nominations, (b) the level and quality of children's moral development, (c) the parenting style used in their homes, and (d) the qualities that their best friends possess.

Upon completion of the questionnaires, participants each received a five-dollar-value gift certificate redeemable at a local movie theatre. In each classroom, a raffle was also carried out to award one child (out of those who had returned their consent forms) a twenty-dollar-value gift certificate redeemable at the same theatre. Feedback from the study was later disseminated to the schools and participants through a letter highlighting the major findings of the study.

### Measures and Variable Definitions

Friendship. Participants were given an alphabetized list of classmates whose parents had consented to their participation (see “Who are your friends?” in Appendix C). From this list, participants were asked to write down the names of the same- and other-sex classmates that they considered friends. Children were instructed to list these friends in decreasing order of preference (i.e., with their best friend occupying the first position on their list) and in two separate columns, according to the relative sex of the friend (i.e., same-sex, other-sex). Although four spaces for each of same- and other-sex friends were provided, participants were instructed to complete as many or as few of the spaces as they desired. These nominations were used to determine whether each child had a friend. A friend was defined as a same-sex individual who was nominated as a best or second-best friend by either of the children whom they had nominated as their best or second-best friend. The mean number of mutually-endorsed friends per child was  $M=.93$  ( $SD=.79$ ) with a range between zero and two; 65.8% of participants ( $n=79$ ) had at least one mutually-endorsed friend.

Moral Development. In the current study, two aspects of moral development were



assessed. One aspect concerned the degree to which children appeared to behave in ways that were indicative of care and/or justice, and the other concerned whether children adopted either preconventional or conventional solutions to moral dilemmas involving peers. Two measures were developed to measure these dimensions: (a) the Moral Orientation Class Play (MOCP) and (b) the Moral Perspectives Questionnaire, version IV (MPQ-IV).

The MOCP was designed to assess the children's levels of justice and care relative to their same-aged peers. Using a peer assessment procedure, generally referred to as the "class play", children nominated participating peers. Nominations were drawn from a list of participating classmates (see "What are they like?" in Appendix C). For each of six items, participants were instructed to nominate one same-sex and one other-sex classmate who most represented the item. To control for potential order effects, this measure was devised so that participants' first nomination for each item would be a same-sex classmate, and their second nomination, an other-sex classmate. Participants were informed to not use their own names, but that they could nominate a given classmate(s) for as many items as they wanted. Combinations of these items were used to calculate children's *justice* and *care* scores. Children's justice scores were determined from the mean number of nominations received from same- and other-sex classmates for each of the following items: (a) "Someone who plays fairly", and (b) "Someone who makes sure that everyone is treated equally". That is, children's justice scores (and similarly so for care scores) are means, each of which were derived from nominations in four areas (i.e., 2 items x 2 sexes). Children's mean justice scores were standardized within sex and within

classroom to control for differences in the number of male and female participants in each classroom. Children's care scores were determined from the mean number of nominations received from same- and other-sex classmates for the following items: (a) "Someone who cares about others", and (b) "Someone who helps others when they need it". The mean scores for care were similarly standardized within sex and within classroom. Moreover, because the internal consistencies for justice and care among boys in one classroom and among girls in two classrooms failed to reach an acceptable level, these subjects were eliminated from the calculation of the overall means, the internal consistencies and all subsequent analyses. Consequently, the overall sample size used for MOCP-related analyses was 100. The overall mean justice score for participants was  $M = .78$  ( $SD = .75$ ) with a range between 0 and 3.25. The overall mean care score for participants was  $M = .73$  ( $SD = .82$ ) with a range between 0 and 3.67. Internal consistency for the justice and care subscales were .65 and .68, respectively (see Appendix D).

The MPQ-IV is a self-report technique designed to assess children's moral development according to Kohlberg's distinction between pre-conventional and conventional reasoning (see "What would you do?" in Appendix C). This questionnaire was based upon a similar questionnaire developed by Sippola (1995). The MPQ-IV consists of five vignettes of situations which provoke moral dilemmas. Following each vignette is a list of possible responses to the dilemma. Participants rated their endorsement of the responses on a 5-point Likert-type scale, where "1" means "not true of what you would do" through to "5" which means "really true of what you would do". All

responses were coded along the two Kohlberg's two levels of moral development (i.e., preconventional, conventional). The overall mean preconventional score for participants was  $M = 2.53$  ( $SD = .28$ ) with a range between 1.81 and 3.26. Internal consistency for the preconventional subscale was .73. The overall mean conventional score for participants was  $M = 2.60$  ( $SD = .40$ ) with a range between 1.67 and 3.67. The internal consistency for the preconventional and conventional subscales were .73 and .65, respectively (see Appendix E).

Parenting Style. Parenting style was assessed in the current study using the Parenting Style Inventory-III (PSI-III), which is based upon Darling and Toyokawa's (1997) PSI-II. The latter scale was created to assess *parenting style* independently of *parenting practices*. Previous scales were found to confound the measurement of parenting style, which characterizes the emotional climate in which parent-child interactions occur, with parenting practices, which focus on the content or goals of socialization (e.g., practices to promote academics, such as helping with homework). The PSI-II was designed to assess the three dimensions of parenting style (warmth, control and psychological autonomy-granting) using five items per dimension, for a total of 15 items. These items were specifically designed to assess the maternal parenting style. For the purposes of the current study, however, the PSI-II was further developed through a two-stage process. In the first stage, a pilot study was conducted to evaluate the generalizability of the PSI-II. Results from the pilot study of 50 fifth- and sixth-grade children indicated that minor modifications were instrumental in increasing the internal reliability of the scale. Consequently, in the second stage, the PSI-II was modified to

become the PSI-III through the following modifications: (a) both parents, in contrast to the mother only, were emphasized in all of the items; (b) the wording of four items was modified; (c) three items were removed; and (d) six new items were introduced. The PSI-III contains 16 items (see Appendix C), which were related to three subscales: control, warmth and psychological autonomy-granting (see Appendix E). In order to interpret participant ratings of the items on these subscales, an important distinction between the phrasing of items on the three subscales need be considered. High participant ratings on the parental warmth subscale and the psychological autonomy-granting subscale, indicate that participants perceive their parents as high in warmth and psychological autonomy-granting, respectively. Due to the reverse-phrasing of some items and the reverse-scoring of other items on the parental control subscale, however, high participant ratings on the parental control subscale indicate that participants perceive their parents as low in control. Internal consistencies for the control, warmth and psychological autonomy-granting subscales were: .74, .78 and .66, respectively.

## Results

Analyses for the study were organized into three sections. In the first section, the internal consistencies of the questionnaires created for the current study were determined. In the second section, analyses were conducted for participant variables such as parenting style subscales, moral orientation quality subscales, and moral orientation level subscales. The third section focuses upon the analyses which contrast participant variables with those of their friends.

In the first section, internal consistencies were determined for the three questionnaires used in the current study: the Moral Orientation Class Play (MOCP), the Moral Perspectives Questionnaire (MPQ) and the Parenting Style Inventory - Version III (PSI - III). The internal consistency values for the subscales of moral orientation quality (justice, care), moral orientation level (preconventional, conventional) and parenting style (control, warmth, autonomy-granting), which apply to the MOCP, MPQ and PSI-III, respectively, are indicated in Appendices D, E and F, respectively.

The second section of the analyses (i.e., those related to participant variables) consisted of analyses of the associations between participant subscales and the effects across participant subscales. Participant subscales were divided into three categories: parenting style subscales, moral orientation subscales and a subscale related to friendship condition. With respect to friendship condition, participants who had a mutually-endorsed friendship were operationally defined as friended, whereas participants who did not receive a nomination in return, from either the classmate whom they nominated as their best same-sex friend or the classmate they nominated as their second-best same-sex

friend, were defined as unfriended. In sum, the second section focuses upon the associations between participants' parenting style subscales and their moral orientation subscales, and examines the differences in participants' moral orientation across parenting groups, sex, and friendship condition.

The third section of analyses investigated the associations between participants' subscales and the subscales pertaining to their friends. Included in these analyses were: (a) associations between participants' parenting style subscales and the parenting style subscales of friends; (b) differences in the moral orientation of participants' friends across participant parenting group (*parenting styles* were referred to as *parenting groups* in this section to account for the potential inaccuracy of children's perceptions of parental control and parental warmth), participant sex, and participant friendship condition; (c) associations between participants' moral orientation subscales and the moral orientation subscales of friends, and (d) differences in friends' parenting style subscales across participant parenting group, participant sex, and participant friendship condition.

#### Analyses of Participant Variables

Analyses were conducted to determine the association between participant variables. Specifically, the associations between parenting style subscales, moral orientation *quality* subscales, and moral orientation *level* subscales were examined. Of these subscales, the moral orientation level subscales merit special mention because of the process by which they were developed. The moral orientation level of children was determined from the MPQ. Responses to moral dilemmas on the MPQ were simultaneously coded on two dimensions: moral orientation level and social orientation.

Due to the presence of 35 items on the MPQ, two dimensions were necessary to categorize items to meet internal consistency requirements. Each of these dimensions consists of two subscales; for moral orientation level these are *preconventional* and *conventional*, and for social orientation the subscales are *prosocial* and *antisocial*. By combining the subscales of these two dimensions, four categories for the MPQ items emerged: *preconventional-prosocial*, *preconventional-antisocial*, *conventional-prosocial* and *conventional-antisocial* responses to moral dilemmas. For the current study, however, only the moral orientation level dimension is related to the hypotheses; the social orientation dimension was nonetheless conserved throughout the analyses to control for the effect of social orientation, thereby providing a purer index of the effects of moral orientation level.

The results of the correlational analyses of participant variables are presented in the tables that follow. Table 1 presents the intercorrelations between participants' parenting style subscales. Table 2 shows the intercorrelations between participants' moral orientation subscales. Table 3 presents the correlation coefficients between parenting style subscales and the moral orientation quality subscales.

Correlational analyses of parenting style subscales and moral orientation quality subscales revealed trends in the association between ratings of parental control and children's justice scores,  $r = .19$ ,  $p < .1$ , and between ratings of the psychological autonomy-granting of parents and children's care scores,  $r = .17$ ,  $p < .1$ . That is, participants who rated their parents higher on items related to control, (meaning they actually perceived their parents as lower in control) tended to receive more peer

Table 1

Intercorrelations between Standardized Participant Parenting Style Subscales

Subscale	1 <sup>a</sup>	2	3
	(N = 119)		
1. Control <sup>a</sup>	(.74)	-.15	.15
2. Warmth		(.78)	.52**
3. Psychological Autonomy-granting			(.66)

Note. Values in parentheses along the diagonal represent the internal consistencies of the subscales. \*\* $p < .05$ .

<sup>a</sup>Due to the phrasing of items and reverse-scoring, *high* ratings on this subscale reflect *low* control.



Table 2

Intercorrelations between Participants' Standardized Moral Orientation Quality and Standardized Moral Orientation Level Subscales

Subscale	1	2	3	4
(N = 100)				
Moral Orientation Quality				
1. Justice	(.65)	.42****	.04	-.01
2. Care		(.68)	.05	.12
Moral Orientation Level				
3. Preconventional			(.73)	.58****
4. Conventional				(.65)

Note. Values in parentheses along the diagonal represent the internal consistencies of the subscales. \*\*\*\*p < .001.

Table 3

Correlation Coefficients between Standardized Participants' Parenting Style Subscales and Standardized Participants' Moral Orientation Subscales

Parenting Style Subscales	Moral Orientation Quality		Moral Orientation Level	
	Justice	Care	Preconventional	Conventional
	(N = 99)		(N = 119)	
Control <sup>a</sup>	.19*	.05	-.18*	-.13
Warmth	.01	.05	.15*	.01
Psychological Autonomy-granting	.09	.17*	.03	-.19**

Note. \* $p < .1$ . \*\* $p < .05$ .

<sup>a</sup>Due to the phrasing of items and reverse-scoring, *high* ratings on this subscale reflect *low* control.

nominations on justice-related items. Additionally, participants who attributed higher ratings to their parents on items related to psychological autonomy-granting tended to receive more peer nominations on care-related items.

Correlational analyses of parenting style subscales and moral orientation level subscales for participants (see Table 3) indicated a significant association between parental autonomy-granting and children's conventional orientation,  $r = -.19, p < .05$ . Thus, for psychological autonomy-granting, it appears that the more children perceived their parents as granting of psychological autonomy, the less they endorsed conventional responses to moral dilemmas.

In addition to analysing participant variables to determine the strengths of association between parenting style subscales and moral orientation subscales, participant variables were also examined using several repeated-measures analyses of variance. First, an analysis was carried out with moral orientation quality (i.e., justice and care scores, standardized within classroom and within sex) as the dependent variable and parenting group and sex as the between-subjects factors. See Table 4 for the tabulated descriptive statistics of the standardized justice and care scores across parenting group and Figure 1 for a graphic presentation of these results. See Table 5 for a summary of the results of the analyses of moral orientation quality (justice, care) as a function of parenting group and sex, as discussed below. Analyses revealed a significant interaction between moral orientation quality and parenting group,  $F(3, 92) = 2.70, p < .05$ . Simple-effects tests for parenting group indicated that children from the permissive group had significantly higher justice scores than care scores,  $F(1, 92) = 5.35, p < .05$ . A simple effects analysis

Table 4

Standardized Justice and Care Scores as a Function of Parenting Group

Parenting Group	n	Justice		Care	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Neglectful	23	.07	.88	.07	1.01
Authoritarian	18	-.47	.66	-.44	.53
Permissive	23	.49	1.22	.01	.94
Authoritative	36	-.12	.83	.17	1.07

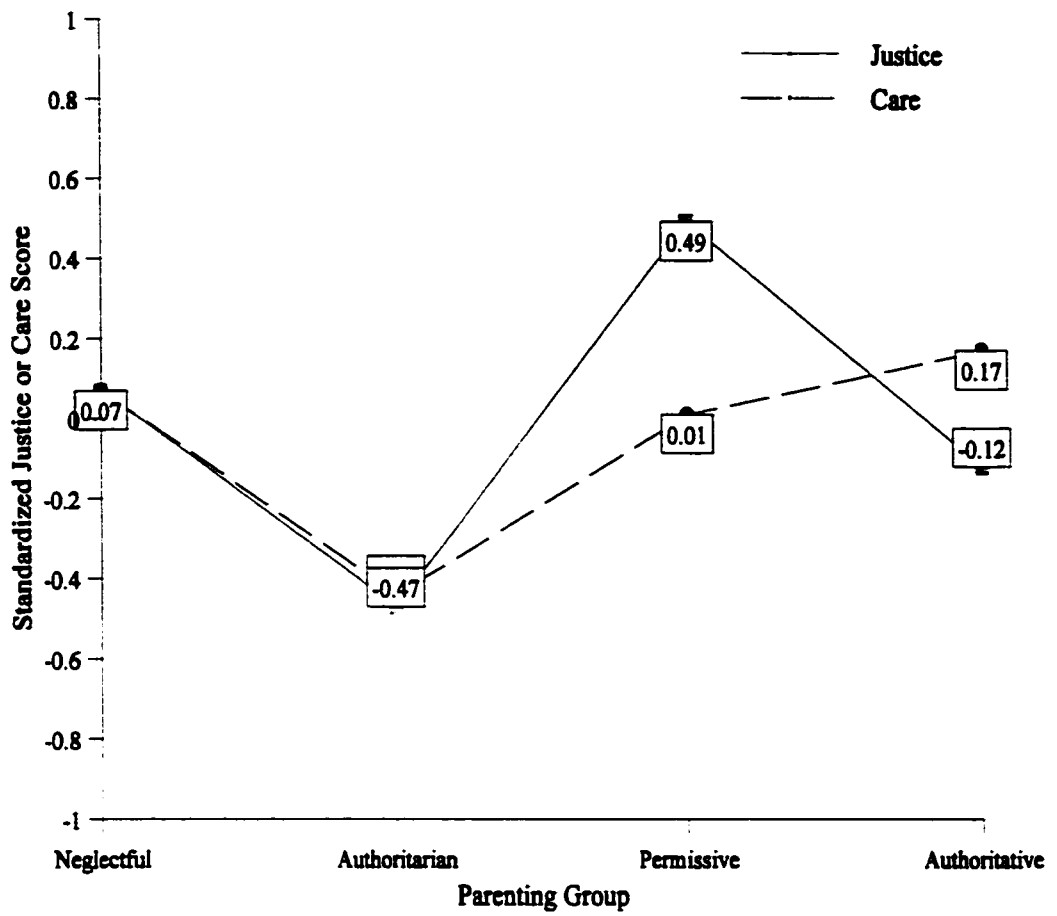


Figure 1. Standardized justice and care scores as a function of parenting group.

Table 5

Findings from Analysis of Variance of Moral Orientation Quality as a Function of Parenting Group and Sex and Findings from Follow-up Tests

Source	df	F
<u>From main analysis:</u>		
Moral Orientation Quality (MOQ) x Parenting Group (PG)	3	2.70**
<u>From Simple effects tests for PG:</u>		
Permissive PG: MOQ	1	5.35**
<u>From simple effects tests for MOQ:</u>		
Justice: PG	3	7.13***
Care: PG	3	5.61**
<u>From Scheffe post hoc tests:</u>		
Justice: Permissive vs. Authoritarian	3	6.09****
Permissive vs. Authoritative	3	3.44**
Care: Authoritative vs. Authoritarian	3	2.88**
MOQ x PG x S (within-group error)	92	(.515)

Note. The value enclosed in parentheses represents the mean square error.

\*\*p < .05. \*\*\*p < .01. \*\*\*\*p < .001.

indicated significant differences in justice scores across parenting group,  $F(3, 92) = 7.13$ ,  $p < .01$ . Scheffe post hoc tests indicated that: (a) justice scores of children in the permissive group were significantly higher than the justice scores of children in the authoritarian group,  $F_s(3, 92) = 6.09$ ,  $p < .001$  and, (b) justice scores of children in the permissive group were significantly higher than the justice scores of children in the authoritative group,  $F_s(3, 92) = 3.44$ ,  $p < .05$ . A simple effects analysis with care as the dependent variable and parenting group as the between-subjects factor revealed a significant difference in care scores across parenting group,  $F(3, 92) = 5.61$ ,  $p < .05$ . Scheffe post hoc tests indicated that the care scores of children in the authoritative group were significantly higher than the care scores of children in the authoritarian group,  $F_s(3, 92) = 2.88$ ,  $p < .05$ . Thus, with respect to justice, children in the permissive group seem to be perceived by their peers as significantly more just than children in either of the authoritarian or authoritative groups. Children in the permissive group also seem to be viewed by their classmates as significantly more just than caring. In terms of care, children in the authoritative group seem to be perceived by their peers as significantly more caring than children raised in authoritarian homes.

Repeated-measures analyses of variance were conducted with the subscales which resulted from the integration of the moral orientation level and social orientation dimensions (preconventional-prosocial, preconventional-antisocial, conventional-prosocial, conventional-antisocial) as the dependent variables and parenting group and sex as between-subjects factors. The above subscales were then combined to produce overall measures of children's *preconventional* and *conventional* moral orientation. The

preconventional and conventional measures were determined from the means of the first two subscales and the last two subscales, respectively. See Table 6 for the tabulated descriptive statistics of children's endorsement of preconventional and conventional responses to moral dilemmas items as a function of sex and parenting group and see Figure 2 for a graphic presentation of these results. See Table 7 for a summary of the results from the multivariate analyses of variance for moral orientation level (preconventional, conventional) as a function of parenting group and sex, as discussed below.

The repeated-measures analysis of moral orientation level as a function of parenting group and sex revealed a moral orientation level by parenting group by sex interaction,  $F(3, 112) = 3.373, p < .01$ . Consequently, simple effects tests for sex and simple effects tests for parenting group were conducted. Simple effects tests revealed: (a) that the interaction between moral orientation level and parenting group was significant for boys,  $F(3, 112) = 2.91, p < .05$ , but not for girls; and (b) that girls endorsed conventional responses significantly more than preconventional responses,  $F(1, 112) = 18.24, p < .001$ . A follow-up simple effects test (i.e., in this case, a pairwise comparison) of boys' ratings of preconventional and conventional responses to moral dilemmas indicated that boys in the neglectful group endorse preconventional responses significantly more than conventional responses,  $F(1, 112) = 6.43, p < .05$ . In addition to follow-up simple effects for sex to clarify the interaction between moral orientation level and parenting group for boys, follow-up simple effects tests for moral orientation level were also conducted. The follow-up simple effects tests for moral orientation level



Table 6

Preconventional and Conventional Moral Orientation Scores as a Function of Sex and Parenting Group

Parenting Group	n	Preconventional		Conventional	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(Boys)					
Neglectful	12	2.49	.33	2.26	.38
Authoritarian	13	2.45	.33	2.56	.29
Permissive	12	2.61	.22	2.52	.31
Authoritative	22	2.66	.31	2.69	.40
(Girls)					
Neglectful	14	2.57	.26	2.88	.52
Authoritarian	11	2.52	.19	2.73	.40
Permissive	20	2.42	.28	2.49	.38
Authoritative	16	2.51	.22	2.61	.27

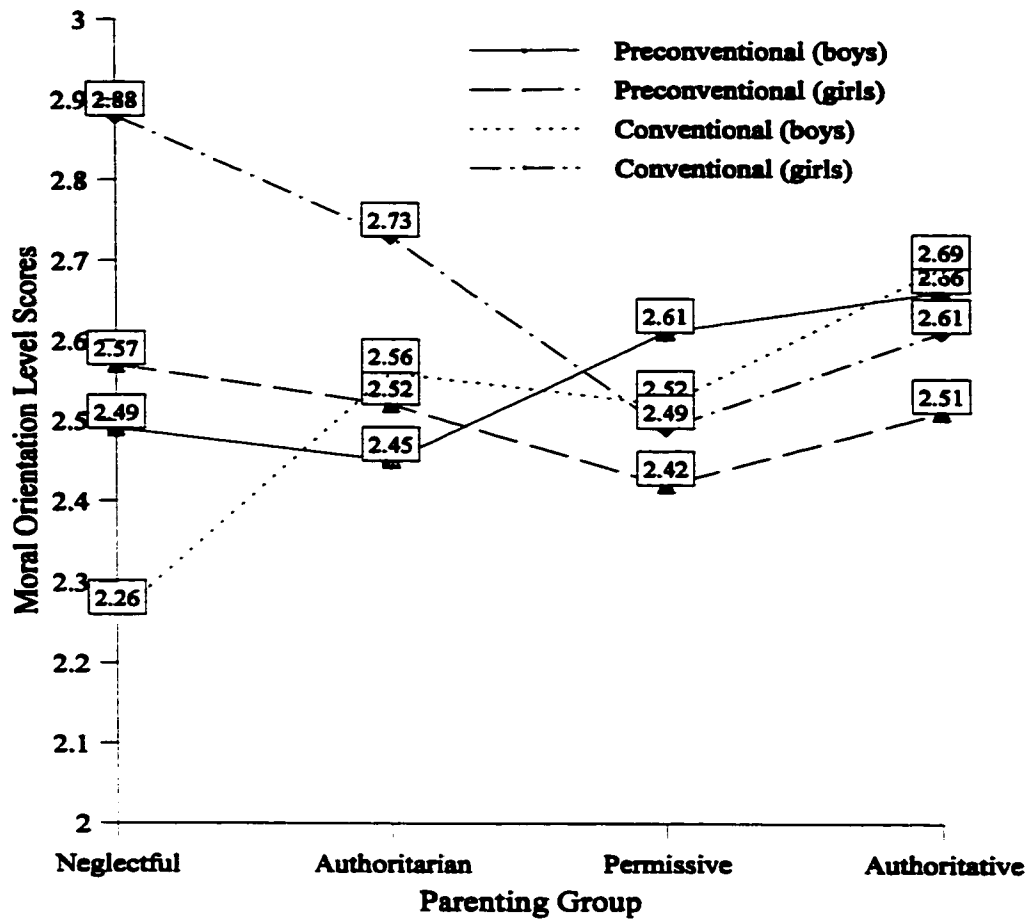


Figure 2. Moral orientation scores as a function of sex and parenting group.

Table 7

Findings from Analyses of Variance of Moral Orientation Level as a Function ofParenting Group and Sex and Findings from Follow-up Tests

Source	df	F
<u>From main analysis:</u>		
Moral Orientation Level (MOL) x Parenting Group (PG) x Sex (S)	3	3.373**
<u>From simple effects tests for S:</u>		
Boys: MOL x PG	3	2.91**
Girls: MOL	1	18.24****
<u>From Follow-up simple effects for boys' MOL x PG:</u>		
Neglectful PG: MOL	1	6.43**
Preconventional: PG	3	3.31**
Conventional: PG	3	10.03****
<u>From Scheffe and Least Significant Difference (LSD) post hoc tests:</u>		
Boys' Preconventional:	--	--
Boys' Conventional:		
Authoritative vs. Neglectful	3	5.04***
Authoritarian vs. Neglectful	--	LSD**
Permissive vs. Neglectful	--	LSD**
<u>From simple effects tests for PG:</u>		
Neglectful: MOL x S	1	19.48****
Authoritarian: MOL	1	6.33**
<u>From follow-up simple effects for Neglectful MOL x S:</u>		
Boys: MOL	1	6.43**
Girls: MOL	1	14.12****
Preconventional: S	1	5.34**
Conventional: S	1	52.10*****
MOQ x PG x S (within-group error)	112	(.093)

Note. Values enclosed in parentheses represent mean square errors.

\*\* $p < .05$ . \*\*\* $p < .01$ . \*\*\*\* $p < .001$ . \*\*\*\*\* $p < .0001$ .

revealed: (a) for the preconventional level, a significant effect was found for parenting group,  $F(3, 112) = 3.31, p < .05$ ; and (b) for the conventional level, a significant effect was found for parenting group as well,  $F(3, 112) = 10.03, p < .001$ . To further clarify the significant effect of parenting group upon boys' ratings of preconventional and conventional responses, several Scheffe and Least Significant Difference (LSD) post hoc tests were conducted. Results from these post hoc tests indicate: (a) no significant differences in boys' ratings of preconventional responses when their ratings were contrasted across parenting groups, taken two parenting groups at a time (within Table 7 the absence of significant findings is indicated by dashed lines); (b) that, according to the Scheffe, boys in the authoritative group rate conventional responses to moral dilemmas significantly higher than do boys in the neglectful group,  $F(3, 112) = 5.04, p < .01$ ; (c) that, according to the LSD, boys in the authoritarian group rate conventional responses to moral dilemmas significantly higher than do boys in the neglectful group,  $p < .05$ ; and (d) that, according to the LSD, boys in the permissive group rate conventional responses to moral dilemmas significantly higher than do boys in the neglectful group,  $p < .05$ .

In addition to simple effects tests for sex, simple effects tests for parenting group were conducted. The simple effects tests for parenting group revealed: (a) that for children in the neglectful group, a significant interaction exists between moral orientation level and sex,  $F(1, 112) = 19.48, p < .001$ ; and (b) that for children in the authoritarian group, a simple effect of moral orientation level exists, indicating that children in the authoritarian group rate conventional items significantly higher than preconventional items,  $F(1, 112) = 6.33, p < .05$ . Follow-up simple effects tests (i.e., pairwise simple

comparisons) for the interaction between moral orientation level and sex for children in the neglectful group (i.e., see item (a) immediately above) indicated that, in contrast to boys in the neglectful group, who endorse preconventional responses significantly more than conventional responses,  $F(1, 112) = 6.43, p < .05$ , girls in the neglectful group endorse conventional responses significantly more than preconventional responses,  $F(1, 112) = 14.12, p < .001$ . Follow-up simple effects tests were also carried out for moral orientation level, revealing: (a) that girls endorse preconventional responses significantly more than boys do,  $F(1, 112) = 5.34, p < .05$ , and (b) that girls also endorse conventional responses significantly more than boys do, (however, for conventional responses the significance of the difference appears to be more marked than for preconventional responses),  $F(1, 112) = 52.10, p < .0001$ .

In sum, the findings of the analyses of variance for moral orientation level as a function of parenting group and sex, revealed several findings related to each of the sexes and to differences between the sexes. First, for the girls in this sample, a clear pattern of response to moral dilemmas emerged: when faced with moral dilemmas the girls endorsed conventional responses significantly more than preconventional responses, irrespective of the parenting group to which they belonged. For the boys in this sample, however, the pattern was less consistent across parenting groups. Whereas boys' endorsements of preconventional responses did not vary significantly across parenting groups, their endorsements of conventional responses did. In fact, boys in the neglectful group endorsed conventional responses significantly less than the boys from any of the other three parenting groups (i.e., boys in the authoritarian, permissive, and authoritative

groups). Moreover, boys in the neglectful group endorsed preconventional responses significantly more than conventional responses. Third, when the endorsements of preconventional and conventional responses were collapsed across sex, it was only for the authoritarian parenting group that a significant difference emerged: children in the authoritarian group endorsed conventional responses significantly more than preconventional responses. Fourth, when the two moral orientation levels were contrasted across sex, a clear pattern was revealed: whereas boys endorsed preconventional responses significantly more than did girls, the converse seemed to apply for girls -- girls endorsed conventional responses to moral dilemmas significantly more than did boys.

#### Analyses of Participants and their Friends

According to the similarity-attraction hypothesis (Byrne & Griffitt, 1973), children seek out similar others as friends. The current study set out to validate this hypothesis insofar as children select friends on the basis of the similarity of their friends' moral orientations, which are argued to be moderated by the parenting style employed in their friends' homes. Consequently, due to the expected similarity in the moral orientations and household parenting styles of childhood friends, it was hypothesized that the moral orientation subscales and the parenting style subscales of participants would be related to the moral orientation subscales and parenting style subscales of their friends. Moreover, it was hypothesized that the similarity of these subscales would not hold up when unfriended participants were contrasted with the classmates they had unilaterally nominated.

Due to the fact that each participant had two sets of subscales (i.e., moral

orientation subscales and parenting style subscales), three series of analyses were required to validate the relations between participants and nominated classmates. First, correlational analyses between the parenting style subscales of participants and the parenting style subscales of nominated peers were conducted for both friended and unfriended participants. Second, the associations between the moral orientation subscales of participants and the moral orientation subscales of nominated peers were evaluated for both friended and unfriended participants. Third, the moral orientation subscales of nominated classmates were analyzed as a function of the characteristics of the participants. The participant characteristics used for the latter series of analyses included parenting style, sex and friendship condition (friended, unfriended). That is, the moral orientations of nominated individuals were examined as a function of participant parenting group, participant sex and whether the participants' friend choice was reciprocated or not.

Correlations between the parenting style subscales of participants and their friends. Correlations from the analyses of the parenting style subscales of participants and the parenting style subscales of nominated classmates are presented in Table 8. These subscales were analyzed to contrast friended and unfriended participants. Results indicated that none of the associations between the parenting style subscales of unfriended participants and the parenting style subscales of the individuals they unilaterally nominated were significant. For friended participants, several significant findings emerged. These findings are considered here in terms of their position relative to the diagonal in the correlation matrix shown in Table 8. Off-diagonal significant

Table 8

Correlation Coefficients between Standardized Participant Parenting Style Subscales and Standardized Parenting Style Subscales of Nominated Classmates as a Function of Friendship Condition

Participant Parenting Style Subscales	Parenting Style Subscales of Nominated Classmates		
	1	2	3
(Classmates as non-friend: $n = 31$ )			
1. Control	.19	.16	.05
2. Warmth	-.11	-.17	-.06
3. Psychological Autonomy-granting	-.03	-.10	-.05
(Classmates as friend: $n = 76$ )			
1. Control	.27**	.00	.00
2. Warmth	.06	-.30***	-.33***
3. Psychological Autonomy-granting	.17	-.29**	-.11

Note. Values enclosed in parentheses represent mean square errors.

\*\* $p < .05$ . \*\*\* $p < .01$ .



correlations include those between participant ratings of parental warmth and friends' ratings of psychological autonomy-granting,  $r = -.33$ ,  $p < .01$ , and between participant psychological autonomy-granting and friend warmth,  $r = -.29$ ,  $p < .05$ . Thus, it appears that the children in this sample who perceived their parents as warm were more likely to befriend individuals who perceive their parents as not granting of much psychological autonomy. Significant on-diagonal correlations, which are related to the similarity-attraction hypothesis, include the following. A significant association was found between children's ratings of parental control and their friends' ratings of parental control,  $r = .27$ ,  $p < .05$ . In this group, therefore, children, appeared to befriend other children whose parents used a degree of control which is similar to that used in their own homes. Correlations between children's ratings of parental warmth and their friends' ratings of parental warmth revealed a significant association,  $r = -.30$ ,  $p < .01$ . This association suggests that children from high-warmth homes may, in fact, select individuals from low-warmth homes as friends and vice-versa. These results suggest that the aspects of friend selection which are related to parental control and parental warmth may operate according to different mechanisms -- one based upon similarity, the other upon complementarity, respectively.

Correlations between the moral orientation subscales of participants and their friends. Results from the analyses of the moral orientation subscales of participants and the moral orientation subscales of their friends indicated a trend toward a shared sense of morality (see Table 9). Similar to the consideration of the results presented in Table 8, the correlation coefficients of Table 9 were examined on the basis of their positions relative

Table 9

**Correlation Coefficients between Standardized Participant Moral Orientation Subscales and Standardized Moral Orientation Subscales of Nominated Classmates as a Function of Friendship Condition**

Participant Moral Orientation Subscales	Moral Orientation Subscales of Nominated Classmates			
	1	2	3	4
(Classmates as non-friend: $n = 32$ )				
Moral Orientation Quality				
1. Justice	-.09	.03	-.15	-.09
2. Care	-.04	-.10	-.05	-.19
Moral Orientation Level				
3. Preconventional	.34*	.26	.26	.31*
4. Conventional	.09	.21	-.20	.09
(Classmates as friend: $n = 68$ )				
Moral Orientation Quality				
1. Justice	.22*	.15	-.08	-.07
2. Care	-.01	.04	.01	.04
Moral Orientation Level				
3. Preconventional	-.03	.08	.03	.16
4. Conventional	-.05	.05	.06	.16

**Note.** \* $p < .1$ .

to the matrix diagonal. Those found on the matrix diagonal are related to the similarity-attraction hypothesis (Byrne & Griffitt, 1973), whereas off-diagonal correlation coefficients are not related to the hypotheses and will not be considered further here. The hypothesis-related finding is the trend for the association between participant justice scores and friend justice scores,  $r = .22$ ,  $p < .1$ , which is in contrast to the non-significant correlation between unfriended participants and the classmates they nominated,  $r = -.09$ ,  $p = .67$ . Thus, as expected for unilaterally-nominated friendships (i.e., non-friends), no significant associations were found between the moral orientation subscales of unfriended participants and the identical moral orientation subscales (i.e., on-diagonal terms) of individuals they nominated. Moreover, as expected according to the similarity-attraction hypothesis for mutually-nominated friendships (i.e., friends), the above-mentioned trend between the justice scores of participants and the justice scores of their friends provides partial support for the contention that children and their friends have similar moral orientations. In sum, the number of justice nominations that a child received from classmates and the number of justice nominations received by his or her friend from the same classmates were related, provided that the child and friend mutually selected each other as friends.

Friends' moral orientation as a function of participant characteristics. In the third set of analyses, the moral orientation of participants' friends was analyzed as a function of the characteristics of the participants (parenting group, sex, friendship condition). Two repeated-measures analyses of variance were conducted. In the first of these, the moral orientation quality (justice, care) of participants' friends' was the dependent variable. In

the second analysis, the moral orientation level of participants' friends (preconventional, conventional) was, again in combination with the social orientation (prosocial, antisocial), the dependent variable. This gave rise to four dependent variables (preconventional-prosocial, preconventional-antisocial, conventional-prosocial, conventional-antisocial) for the analysis of participants' friends moral orientation level as a function of participant characteristics.

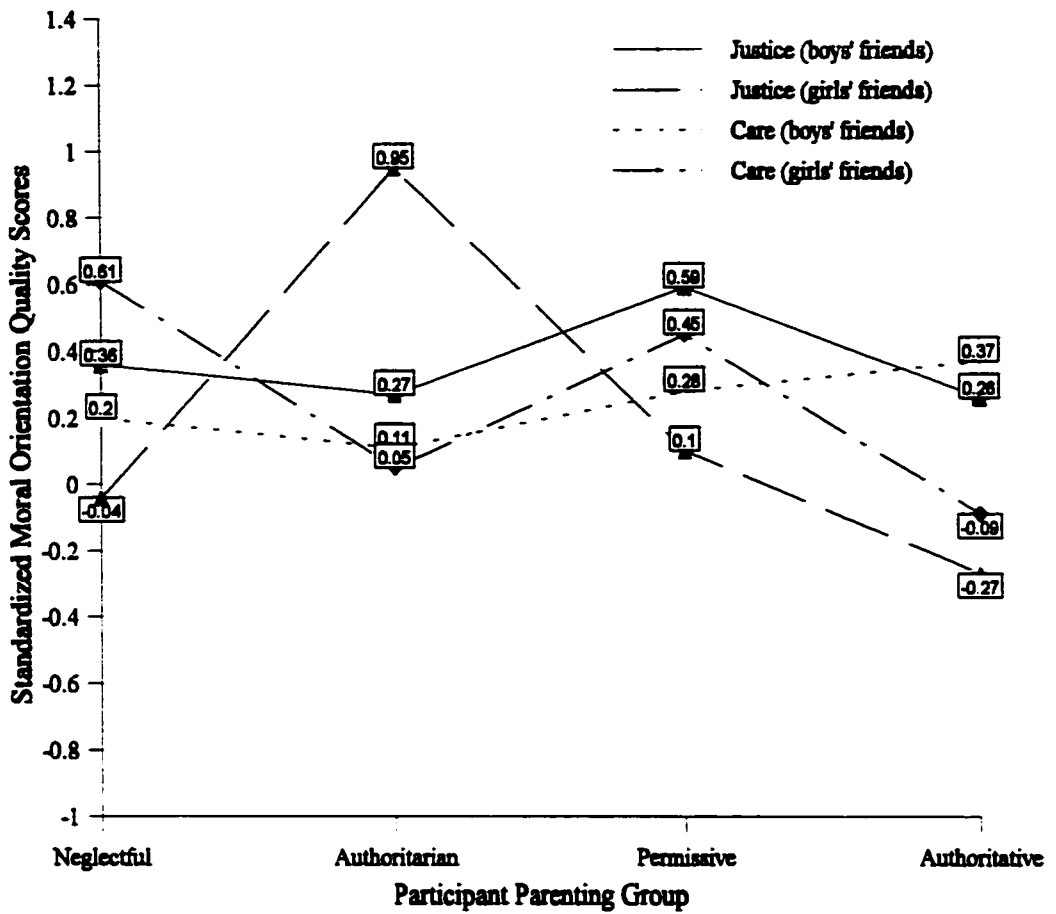
Results from the first analysis (i.e., with the moral orientation quality of participants' friends as the dependent variable) revealed a significant three-way interaction between the moral orientation quality of participants' friends, participant parenting group and participant sex,  $F(3, 78) = 3.08, p < .05$ . (see Table 10 for the descriptive statistics for the standardized moral orientation quality scores of participants' friends as a function of participant sex and participant parenting group, to Figure 3 for a graphic presentation of these group statistics, and to Table 11 for a summary of the results of the analyses). Consequently, two sets of simple effects tests were conducted: (a) simple effects tests for participant sex, and (b) simple effects tests for participant parenting group.

Simple effects tests for participant sex revealed a significant two-way interaction between the moral orientation quality (justice, care) of participants' friends and participant parenting group for girls only,  $F(3, 78) = 2.93, p < .05$ . Several follow-up simple effects tests were, thus, carried out to elucidate this two-way interaction for girls. First, a follow-up simple effects test was conducted for each of the four participant parenting groups to determine whether significant differences existed across the justice

Table 10

Standardized Moral Orientation Quality Scores of Participants' Friends as a Function of Participant Sex and Participant Parenting Group

		Standardized Moral Orientation Quality Scores of Friends			
Participant Parenting Group	<u>n</u>	Justice		Care	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(Boys)					
Neglectful	8	.36	1.16	.20	1.28
Authoritarian	11	.27	.86	.11	.74
Permissive	11	.59	.89	.28	1.07
Authoritative	21	.26	.98	.37	1.06
(Girls)					
Neglectful	14	-.04	.89	.61	1.23
Authoritarian	4	.95	1.45	.05	.73
Permissive	10	.10	.99	.45	1.01
Authoritative	15	-.27	.60	-.09	1.01



**Figure 3.** Standardized moral orientation quality scores of participants' friends as a function of participant sex and participant parenting group.

Table 11

**Findings from Analysis of Variance of Participant Friends' Moral Orientation Quality as a Function of Participant Parenting Group, Participant Sex and Friendship Condition and Findings from Follow-up Tests**

Source	df	F
<b><u>From main analysis:</u></b>		
Friends' Moral Orientation Quality (FMOQ) x Parenting Group (PG) x Sex (S)	3	3.08**
<b><u>From simple effects tests for S:</u></b>		
Girls: FMOQ x PG	3	2.93**
<b><u>From Follow-up simple effects for girls' FMOQ x PG:</u></b>		
Neglectful PG: FMOQ	1	5.82**
Authoritarian PG: FMOQ	1	4.17**
Friends' Justice: PG	3	6.23***
Friends' Care: PG	3	5.28***
<b><u>From Scheffe and Least Significant Difference (LSD) Tests for Friends' Justice:</u></b>		
Authoritarian vs. Authoritative:	3	3.37**
Authoritarian vs. Neglectful:	--	LSD***
Authoritarian vs. Permissive:	--	LSD**
<b><u>From Least Significant Difference (LSD) Tests for Friends' Care:</u></b>		
Neglectful vs. Authoritative:	--	LSD***
Neglectful vs. Authoritarian:	--	LSD**
Permissive vs. Authoritative:	--	LSD**
<b><u>From simple effects tests for PG:</u></b>		
Neglectful: FMOQ x S	1	7.73***
Authoritarian: FMOQ	1	4.63**
<b><u>From follow-up simple effects for Neglectful FMOQ x S:</u></b>		
Girls: FMOQ	1	5.82**
Friends' Justice: S	1	4.39**
Friends' Care: S	1	3.37
MOQ x PG x S (within-group error)	78	(.465)

**Note.** Values enclosed in parentheses represent mean square errors. \*\* $p < .05$ . \*\*\* $p < .01$ .

and care scores of friends; this test indicated that: (a) the friends of girls from neglectful families had significantly higher care scores than justice scores,  $F(1, 78) = 5.82, p < .05$ ; and (b) the friends of girls from authoritarian families had significantly higher justice scores than care scores,  $F(1, 78) = 4.17, p < .05$ . Second, a follow-up simple effects test with the justice scores of girls' friends as the dependent variable and the participant parenting group as the between-subjects factor was carried out. The justice scores of girls' friends varied significantly across participant parenting group,  $F(3, 78) = 6.23, p < .01$ . Scheffe post hoc tests indicated that the friends of girls in the authoritarian group were significantly more just than the friends of girls in the authoritative group,  $F_s(3, 78) = 3.37, p < .05$ . Least Significant Difference (LSD) post hoc tests indicated that: (a) the justice scores of the friends of girls in the authoritarian group were significantly higher than the justice scores of the friends of girls in the neglectful group,  $p < .01$ ; and (b) the justice scores of the friends of girls in the authoritarian group were significantly higher than the justice scores of the friends of girls in the permissive group,  $p < .05$ . Third, a simple effects test with the care scores of friends as the dependent variable and participant parenting group as the between-subjects factor revealed that friends' care scores varied significantly across participant parenting group,  $F(3, 78) = 5.28, p < .01$ . LSD tests revealed that: (a) the care scores of the friends of girls in the neglectful group were significantly higher than the care scores of the friends of girls in the authoritative group,  $p < .01$ ; (b) the care scores of the friends of girls in the neglectful group were significantly higher than the care scores of the friends of girls in the authoritarian group,  $p < .05$ ; and (c) the care scores of the friends of girls in the permissive group were



significantly higher than the care scores of the friends of girls in the authoritative group,  $p < .05$ .

This series of simple effects tests for participant sex, therefore, revealed several significant findings: (1) girls in the neglectful group select friends who are perceived by classmates as more caring than just, (2) the friends of girls in the authoritarian group are perceived by classmates as more just than caring, (3) the friends of girls in the authoritarian group are perceived by classmates as significantly more just than the friends of girls from any of the other three parenting groups (i.e., authoritative, neglectful, and permissive), (4) the friends of girls in the neglectful group are perceived as more caring than the friends of girls from either of authoritative homes or authoritarian homes, and (5) the friends of girls in the permissive group are perceived as more caring than the friends of girls in the authoritative group. The above findings support the argument for complementarity between friends. Girls in the neglectful group, which may lack the responsiveness (care) expected in homes that are higher in warmth, befriend girls who are perceived as caring. For girls in the authoritarian group, it appears that some aspects of friend selection may be based upon complementarity as well. Insofar as high parental control is associated with lower justice scores (see Table 3), girls in the authoritarian group, which are defined as high in parental control, are likely to receive fewer nominations of justice from classmates. In fact, Table 4 indicates that children from authoritarian families were perceived as being the least just. In contrast to the low justice scores of girls in the authoritarian group, the friends of girls in the authoritarian group were perceived as significantly more just (i.e., that advocate fairness and equality) than

caring. Moreover, results from the follow-up simple effects tests for sex indicated that the friends of girls in the authoritarian group were significantly more just than the friends of girls from any of the other parenting groups.

Simple effects tests for participant parenting group, which were conducted to further clarify the three-way interaction between the moral orientation quality of participants' friends, participant parenting group and participant sex, indicated that, for the neglectful parenting group, a significant two-way interaction between the moral orientation quality of participants' friends and participant sex exists,  $F(1, 78) = 7.73, p < .01$ . These simple effects tests for parenting group further indicated that the friends of children in the authoritarian group have significantly higher justice scores than care scores,  $F(1, 78) = 4.63, p < .05$ . As a result of the two-way interaction between the moral orientation quality of participants' friends and participant sex, four follow-up simple effects tests were conducted exclusively for participants in the neglectful group. First, a follow-up simple effects test was carried out for boys in the neglectful group to determine whether significant differences existed between the justice and care scores of boys' friends -- no significant differences were found,  $F(1, 78) = 2.84, n.s.$  Second, a follow-up simple effects test for girls in the neglectful group revealed that the care scores of their friends were significantly higher than the justice scores of their friends,  $F(1, 78) = 5.82, p < .05$ . Third, a follow-up simple effects test for justice across sex for participants in the neglectful group indicated that the justice scores of boys' friends were significantly higher than the justice scores of girls' friends,  $F(1, 78) = 4.39, p < .05$ . Fourth, a follow-up simple effects test for care across participant sex for participants in the neglectful group

indicated no significant difference between the care scores of boys' friends and the care scores of girls' friends,  $F(1, 78) = 3.37$ , n.s.

In sum, findings from simple effects tests for parenting group emerged for participants in the neglectful group and for participants from authoritarian homes. It appears that girls in the neglectful group befriend individuals who are perceived by classmates as more caring than just. This finding confirms a similar result from the simple effects tests for sex in the above paragraph. Also for children in the neglectful group, the justice scores of the friends of boys were significantly higher than the justice scores of the friends of girls in the neglectful group. For children in the authoritarian group, the justice scores of their friends were significantly higher than the care scores of their friends.

In the second series of repeated-measures analyses for the moral orientation level of participants' friends, the dependent variables were created by combining two dimensions: the moral orientation level (preconventional, conventional) of participants' friends', and the social orientation (prosocial, antisocial) of participants' friends. The resulting dependent variables were: preconventional-prosocial, preconventional-antisocial, conventional-prosocial and conventional-antisocial. The hypothesis-related dependent variables are those related to the moral orientation level of participants' friends; the social orientation of participants' friends' was included in the analysis, however, to control for the effect of social orientation, which accounted for an important part of the overall variance. The repeated-measures analysis, therefore, consisted of four within-subjects dependent variables (i.e., participants' friends ratings of: preconventional-

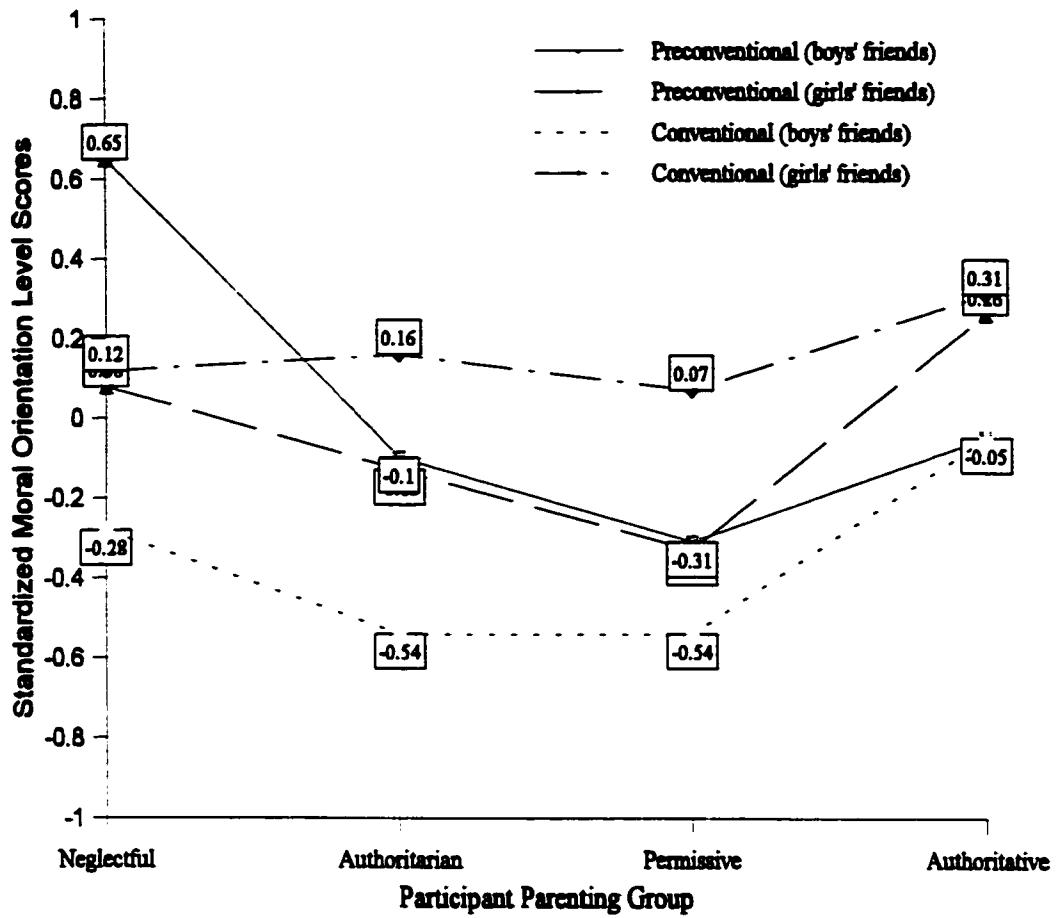
prosocial, preconventional-antisocial, conventional-prosocial and conventional-antisocial responses to moral dilemmas) and participant parenting group, participant sex and friendship condition as the between-subjects factors. See Table 12 for the descriptive statistics of the standardized moral orientation level scores of participants' friends as a function of participant sex and participant parenting group, to Figure 4 for a graphic presentation of these group statistics and to Table 13 for the results from the analyses. The results indicated a significant three-way interaction between the moral orientation level of participants' friends, participant parenting group and participant sex,  $F(3, 94) = 2.98, p < .05$ . Consequently, two sets of simple effects tests were conducted to clarify this interaction: (a) simple effects tests for participant sex, and (b) simple effects tests for participant parenting group. These analyses are outlined in the following two paragraphs.

Simple effects tests for participant sex revealed a significant two-way interaction for boys: moral orientation level of boys' friends (preconventional, conventional) by boys' parenting group,  $F(3, 94) = 3.04, p < .05$ . Three follow-up simple effects tests were, therefore, carried out for male participants to clarify this two-way interaction. First, for each participant parenting group, the four within-subjects dependent variables (i.e., participants' friends ratings of: preconventional-prosocial, preconventional-antisocial, conventional-prosocial and conventional-antisocial responses to moral dilemmas) were contrasted across participant friendship condition (friended, unfriended). Results revealed that the friends of boys in the neglectful group endorsed preconventional responses to moral dilemmas significantly more highly than conventional responses,  $F(1, 78) = 8.90, p < .01$ . Second, a follow-up simple effects test for the preconventional level of moral

Table 12

**Standardized Moral Orientation Level Scores of Participants' Friends as a Function of Participant Sex and Participant Parenting Group**

Participant Parenting Group	n	Standardized Moral Orientation Level Scores of Friends			
		Preconventional		Conventional	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(Boys)					
Neglectful	8	.65	.80	-.28	.87
Authoritarian	11	-.10	1.07	-.54	.56
Permissive	12	-.31	1.28	-.54	.75
Authoritative	22	-.05	1.15	-.05	.87
(Girls)					
Neglectful	14	.08	.72	.12	1.03
Authoritarian	9	-.13	1.17	.16	1.23
Permissive	18	-.33	.95	.07	1.22
Authoritative	16	.26	.88	.31	1.19



**Figure 4.** Standardized moral orientation level scores of participants' friends as a function of participant sex and participant parenting group.

Table 13

**Findings from Analysis of Variance of Participant Friends' Moral Orientation Level****(Preconventional, Conventional) as a Function of Participant Parenting Group, Participant****Sex and Friendship Condition and Findings from Follow-up Tests**

Source	<u>df</u>	<u>F</u>
<b><u>From main analysis:</u></b>		
Friends' Moral Orientation Level (FMOL) x Parenting Group (PG) x Sex (S)	3	2.98**
<b><u>From simple effects tests for S:</u></b>		
Boys: FMOL x PS	3	3.04**
<b><u>From Follow-up simple effects for boys' FMOL x PS:</u></b>		
Neglectful PG: FMOL	1	8.90***
Preconventional: PG	3	4.13***
Conventional: PG	3	3.93**
<b><u>From Least Significant Difference (LSD) Tests for Preconventional:</u></b>		
Neglectful vs. Permissive:	--	LSD**
<b><u>From simple effects tests for PG:</u></b>		
Neglectful: FMOL x S	1	6.58**
Permissive: FMOL x S	1	4.03**
<b><u>From follow-up simple effects for Neglectful FMOL x S:</u></b>		
Boys: FMOL	1	8.90***
Conventional: S	1	4.65**
MOQ x PG x S (within-group error)	94	(.260)

**Note.** Values enclosed in parentheses represent mean square errors. \*\* $p < .05$ . \*\*\* $p < .01$ .

orientation was carried out for boys' friends using a repeated-measures analysis of variance with the ratings of boys' friends on preconventional variables (i.e., preconventional-prosocial and preconventional-antisocial) as the dependent variables and participant friendship condition and participant parenting group as the between-subjects factors. The ratings of boys' friends on preconventional responses to moral dilemmas were found to vary significantly as a function of participant parenting group,  $F(3, 94) = 4.13, p < .01$ . LSD post hoc tests revealed that the friends of neglectful boys endorse preconventional responses significantly more than do the friends of boys in the permissive group,  $p < .05$ . Third, a follow-up simple effects test was conducted for boys using a repeated-measures analysis of variance with the ratings of boys' friends on conventional variables (i.e., conventional-prosocial, conventional-antisocial) as the dependent variables and participant friendship condition and participant parenting group as the between-subjects factors. The ratings of boys' friends on conventional responses were found to differ significantly across participant parenting group,  $F(3, 94) = 3.93, p < .05$ . Post hoc pair-wise comparisons across participant parenting groups did not, however, reveal any significant differences in the ratings of participants' friends on conventional responses. In sum, simple effects tests for participant sex, which were used to clarify the three-way interaction between the moral orientation level of participants' friends, participant parenting group and participant sex, reconfirmed that the friends of boys in the neglectful group endorse preconventional responses to moral dilemmas significantly more than conventional responses to moral dilemmas. Additionally, these analyses indicated that the friends of boys in the neglectful group endorse preconventional responses



significantly more than the friends of boys in the permissive group. When compared to the results of boys in the neglectful group themselves (see Table 6), the results reveal a similarity in the manner in which both boys in the neglectful group and their friends respond to moral dilemmas.

Simple effects tests for participant parenting group were conducted to further clarify the three-way interaction between the moral orientation level of participants' friends, participant parenting group and participant sex. These tests were conducted, as above, with four within-subjects dependent variables (i.e., participants' friends ratings of: preconventional-prosocial, preconventional-antisocial, conventional-prosocial and conventional-antisocial responses to moral dilemmas) and with participant friendship condition and participant sex as between-subjects factors. Results revealed that: (a) a significant interaction between the moral orientation level of participants' friends and participant sex for children in the neglectful group,  $F(1, 94) = 6.58, p < .05$ ; and (b) a significant interaction between the moral orientation level of participants' friends and participant sex for children in the permissive group,  $F(1, 94) = 4.03, p < .05$ . Follow-up simple effects tests for the significant interaction between the moral orientation level of participants' friends and participant sex for children in the neglectful group revealed that: (a) the friends of boys in the neglectful group endorse preconventional responses significantly more than conventional responses,  $F(1, 94) = 8.90, p < .01$ ; and (b) girls in the neglectful group endorse conventional responses significantly higher than do the friends of boy in the neglectful group,  $F(1, 94) = 4.65, p < .05$ . In short, these findings confirm those found earlier with respect to the friends of boys in the neglectful group; the

friends of boys from neglectful endorse preconventional responses significantly more than they endorse conventional responses. Moreover, the friends of boys in the neglectful group endorse preconventional responses significantly more than do the friends of boys in the permissive group. The friends of girls in the neglectful group were found to endorse conventional responses significantly more the friends of boys in the neglectful group.

Friends' parenting style as a function of participant characteristics.

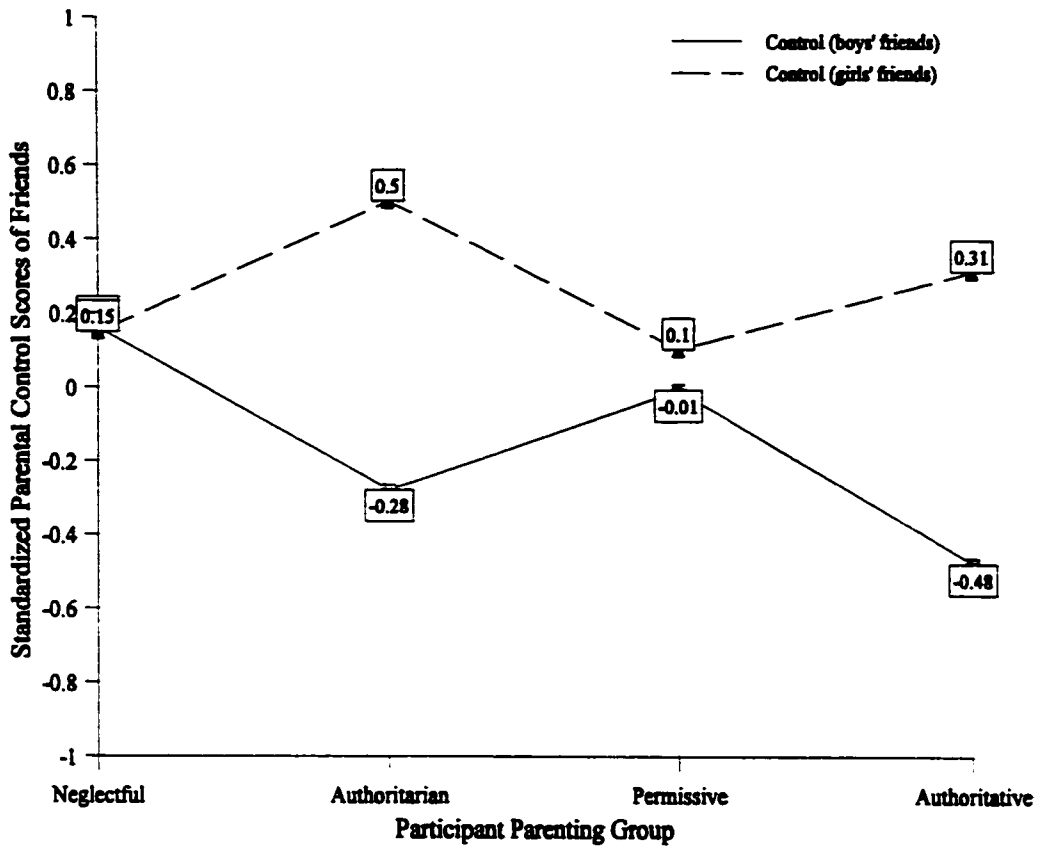
The third series of repeated-measures analyses was used to further address the hypothesis related to the similarity between the parenting style employed in children's homes and the parenting style used in the homes of their friends. In order to investigate this hypothesis, an analyses of variance were conducted to examine the each of the parenting style subscales (i.e., one analysis for control, one for warmth and one for psychological autonomy-granting) of participants' friends as a function of the following between-subjects factors: participant parenting group, participant friendship condition and participant sex. The descriptive statistics upon which these analyses were based are summarized in Table 14 and presented graphically in Figures 5, 6 and 7.

Results from the analysis of variance of participants' friends' ratings of *parental control* as a function of participant parenting group, participant sex and participant friendship condition revealed a trend for participant sex,  $F(1, 92) = 2.97, p < .1$ . Results from the analysis of variance of participants' friends' ratings of *parental warmth* as a function of participant parenting group, participant sex and participant friendship condition revealed a significant main effect for participant parenting group,  $F(3, 92) = 3.09, p < .05$ . Scheffe post hoc tests revealed that the friends of children in the neglectful

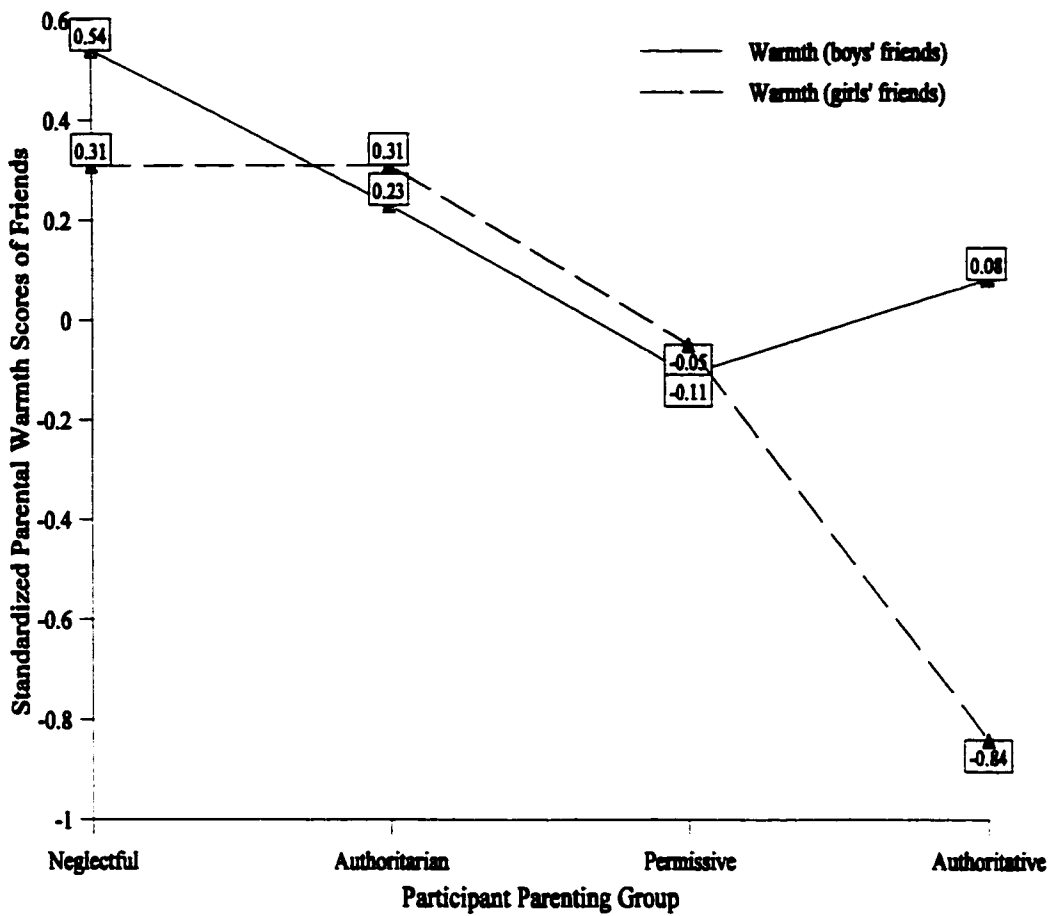
Table 14

Standardized Parenting Style Subscale Scores of Participants' Friends as a Function of Participant Sex and Participant Parenting Group

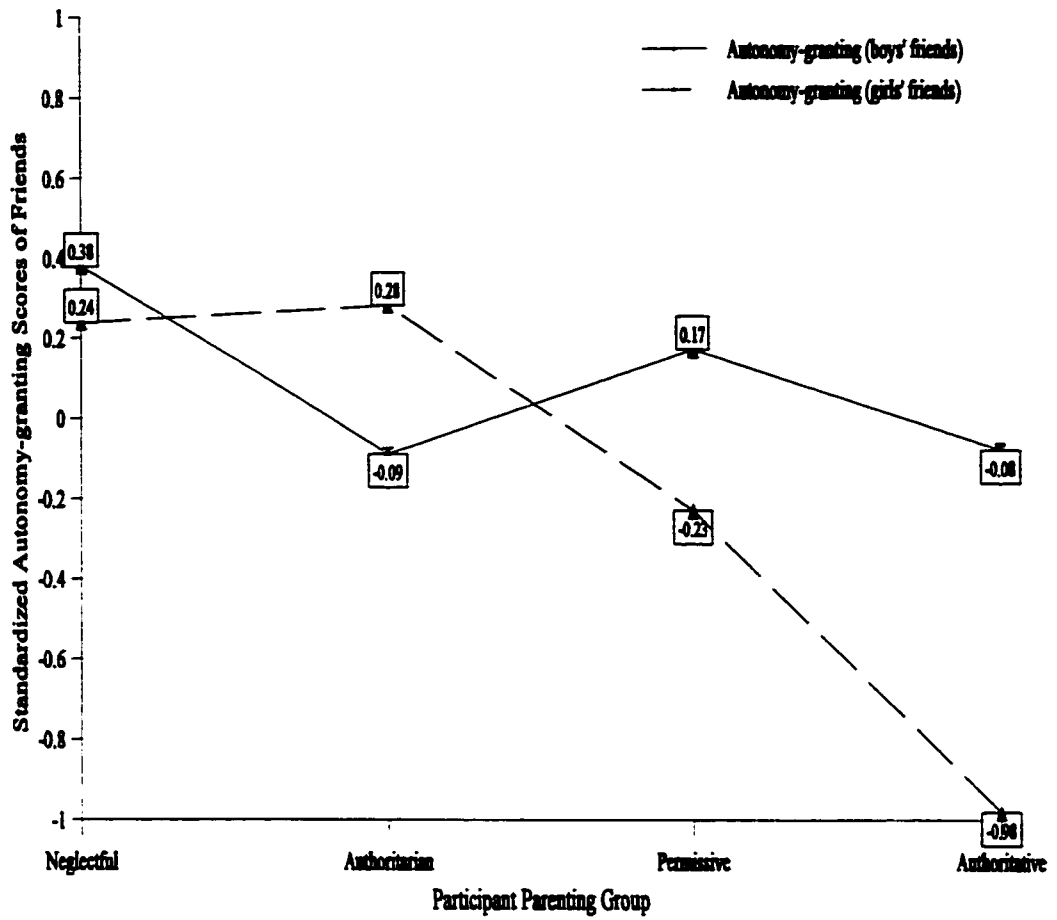
		Standardized Parenting Style Subscale Scores of Friends					
Participant Parenting Group	n	Control		Warmth		Psychological Autonomy-granting	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(Boys)							
Neglectful	8	.16	.78	.54	.39	.38	.90
Authoritarian	11	-.28	.82	.23	.64	-.09	1.07
Permissive	12	-.01	.63	-.11	.62	.17	.89
Authoritative	20	-.48	.64	.08	1.21	-.08	1.05
(Girls)							
Neglectful	14	.15	1.26	.31	.70	.24	.75
Authoritarian	9	.50	.61	.31	.55	.28	.77
Permissive	18	.10	1.06	-.05	.77	-.23	.84
Authoritative	16	.31	1.01	-.84	1.00	-.98	1.04



**Figure 5.** Standardized parental control of participants' friends as a function of participant sex and participant parenting group.



**Figure 6.** Standardized parental warmth of participants' friends as a function of participant sex and participant parenting group.



**Figure 7.** Standardized parental psychological autonomy-granting scores of participants' friends as a function of participant sex and participant parenting group.

group rate their parents as significantly more warm than do the friends of participants in the authoritative group,  $F_2(3, 92) = 3.20, p < .05$ . Results from the analysis of variance of participants' friends' ratings of *psychological autonomy-granting by parents* as a function of participant parenting group, participant sex and participant friendship condition revealed a significant main effect for participant parenting group,  $F_2(3, 92) = 2.75, p < .05$ . Scheffe post hoc tests revealed that the friends of children in the neglectful group rate their parents as significantly more granting of psychological autonomy than do the friends of participants in the authoritative group,  $F_2(3, 92) = 3.02, p < .05$ . Accordingly, it appears that the pattern of attraction between friends varies as a function of the parenting style subscale being considered.

In order to interpret the results from the analysis of participants' friends' ratings of parental control as a function of participant parenting group, participant sex and participant friendship condition, it is important to examine them with due consideration for previous findings (i.e., the positive correlation between participants' ratings of parental control and the participants' friends' ratings of parental control,  $r = .27, p < .05$ , as indicated in Table 8). This positive correlation for the levels of parental control found in the homes of children and their friends indicates a degree of similarity in the manners in which friends are parented. That this significant association should emerge when parenting style was analyzed in terms of its dimensions (i.e., control, warmth, psychological autonomy-granting) when taken one at a time, but not when the dimensions of parenting style were combined to form categories (i.e., neglectful, authoritarian, permissive, authoritative) may signal the loss of power oft-associated with the

categorization of variables. The lack of a significant result for the analysis of participants' friends' ratings across participant parenting groups may be an artefact of the trend for sex differences mentioned above. That is, upon closer examination of the means across participant parenting groups, a different pattern for the selection of friends on the basis of parental control emerged for boys and girls. Girls from high-control homes (i.e., authoritarian or authoritative homes) befriend girls who rate their parents as higher on the control dimension than do the friends of girls from low-control homes (i.e., neglectful or permissive homes). For boys, the pattern for the selection of friends on the basis of parental control appears to be the converse of that for girls: boys from high-control homes befriend boys who rate their parents as lower on the control dimension than do the friends of boys from low-control homes (i.e., neglectful or permissive homes). These sex differences in friend selection based upon parental control may account for the absence of significant differences in participants' friends' ratings of parental control across participant parenting groups.

In contrast to the indeterminate results for the analysis of parental control, the results from the analysis of parental warmth ratings by participants' friends (as a function of participant parenting group, participant sex and participant friend condition) indicate that friend selection was not made solely on the basis of similarity for all parenting style dimensions. The significant differences in participants' friends' ratings of parental warmth across participant parenting group run counter to the original hypothesis that children befriend individuals from similarly warm homes. Moreover, that the friends of children in the neglectful group rated their parents as significantly more warm than did



the friends of children in the authoritative group supports the contention that, in terms of parental warmth, friend selection may be based upon complementarity.

The significant result from the analysis of participants' friends' ratings of their parents' psychological autonomy-granting do not support the similarity attraction hypothesis (Byrne & Griffitt, 1973) either. However, a more detailed explanation may be required here. Although by definition, psychological autonomy-granting and control are considered sub-elements of the parental demandingness dimension, the significant correlation between participants' ratings of parental warmth and participants' ratings of parental psychological autonomy-granting (see Table 1) suggests that the PSI-III items related to psychological autonomy-granting may not, in fact, tap into the parental demandingness (control) dimension, but rather into the parental responsiveness (warmth) dimension. In this respect, it appears necessary to consider the psychological autonomy-granting subscale as representative of parental responsiveness (warmth). On this basis then, the finding that the friends of children in the neglectful group (i.e., low warmth) rated their parents as significantly higher in psychological autonomy-granting than did the friends of children from authoritative homes (i.e., high warmth) indicates that friend selection as related to psychological autonomy-granting operated according to complementarity as well.

## Discussion

The purpose of the current study was to explore the nature of the relation between parenting style, children's moral development, and children's friendship choices.

Specifically, it was hypothesized: (a) that children would be attracted to each other on the basis of similar moral development; and (b) that children who befriend each other on the basis of similar moral development would also, by virtue of the relation between moral development and parenting style, be raised in homes in which the parenting style dimensions (i.e., control, warmth, and autonomy-granting) were similar.

The constructs of moral development and parenting style were each operationalized according to their underlying dimensions, which resulted in several subscales for each construct. For moral development, two dimensions were used: (a) the quality dimension of moral development, which was defined in terms of the orientations of *justice* and *care* proposed by Kohlberg (1963) and Gilligan (1982), respectively; and (b) the level dimension of moral development, which reflects the degree to which children have developed morally.

In a similar manner, parenting style was also evaluated in terms of its underlying dimensions. In brief, parent-child interactions were defined by Baumrind (1978) through combinations of the parental demandingness (control) and parental responsiveness (warmth) dimensions, which gave rise to four distinct categories (parenting groups): neglectful, authoritarian, permissive, and authoritative. In the current study, a third aspect of parent-child interactions was also considered as well: parental psychological autonomy-granting. In order to facilitate the comparison of children's perceptions of their

interactions with their parents to their friends' perceptions of interactions with their respective parents, the parenting group categories were used. In addition to using the parenting groups, the individual parenting style subscales were used in other analyses to avoid the loss of information often associated with the categorization of continuous variables.

The validity of the mediational model was evaluated using several series of analyses of the subscales of parenting style and of the subscales of moral development. These analyses were divided into two sections based on the part of the model they addressed. The first section addressed the relation between parenting style and children's moral development. The findings for this section were gleaned from participants' scores on the parenting style subscales and participants' scores on the moral development subscales. The second section of analyses addressed the results from the comparison of the parenting style subscale scores and moral development subscale scores of participants to the parenting style subscale scores and moral development subscale scores of their friends. These sections were further subdivided according to the type of analysis (e.g., correlations, analyses of variance) being conducted. The discussion of these results, therefore, will follow a format similar to that of the analyses, beginning with an examination of the results related to the association between participant parenting style and participant moral development, and concluding with a review of the results from the comparison of the parenting style subscales and moral development subscales of children to the parenting style subscales and moral development subscales of their friends.

## Analyses of Participant Variables

Participant moral orientation subscales. The first hypothesis argued that the parenting style used in children's homes would be associated with the moral development of children. In order to understand how these two constructs (parenting style and moral development) are related, the relation between the subscales of each of these measures was examined. Moral development was assessed in terms of moral orientation quality (justice, care) and moral orientation level (preconventional, conventional). As previously mentioned, more advanced moral development was defined in terms of high justice scores, high care scores, lower endorsements of preconventional responses, and higher endorsement of conventional responses to moral dilemmas. Accordingly, several findings were expected in relation to the moral orientation subscales: (a) justice scores would be positively related to conventional ratings, (b) justice scores would be negatively related to preconventional ratings, (c) care scores would be positively related to conventional ratings, and (d) care scores would be negatively related to preconventional ratings.

The results from the correlational analyses between the moral orientation *quality* scores and the moral orientation *level* scores (see Table 2) did not reveal any of the expected significant correlations, suggesting that moral orientation quality and moral orientation level may be tapping relatively independent dimensions of moral development. When interpreting these findings, however, it is important to consider how the moral orientation scores were determined. Whereas justice and care scores were determined from the nominations of peers, preconventional and conventional scores were derived from self-report ratings. For the above subscale correlations, however, justice

scores were significantly associated with care scores and the ratings of pre-conventional responses were significantly associated with the ratings of conventional responses. Given that the strength of the association between justice and care (see Table 2) was well below that necessary to be indicative of multicollinearity (i.e.,  $r = .85$  or above), the correlation between justice and care suggests that these subscales account for sufficiently separate, yet overlapping, portions of the variance of the *quality* dimension of moral orientation. The same can be said of the correlation between pre-conventional and conventional ratings and their representation of the overall variance of the *level* dimension of moral orientation.

In light of the different techniques used to obtain the subscale scores for the *quality* and the subscale scores for the *level* dimensions of moral orientation, several factors may account for the lack of significant correlations between these two dimensions of moral development. First, children's ratings of pre-conventional and conventional responses to moral dilemmas may be confounded by a social-desirability bias, whereby participants under- or over-estimate their true endorsement of responses in a manner consistent with their self-image or the image they wish to project to others. Second, due to the fact that children's justice and care scores were determined from the number of nominations received, the accurate measurement of children's actual moral development may be limited because children may be more likely to nominate their friends over non-friends who may embody the traits of justice and care more.

Participant parenting style subscales. With respect to the three subscales of parenting style, several findings were expected: (a) control and autonomy, which both tap

the parental demandingness dimension, were expected to be positively correlated, (b) no significant correlation between parental warmth and parental control was expected, insofar as these are independent dimensions, and (c) no significant correlation was predicted between parental warmth and psychological autonomy-granting. Results did not confirm the above expectations (see Table 1). In fact, only warmth and psychological autonomy-granting were significantly correlated. When the items which are related to each of these subscales are examined (see Appendix F), it appears that, in contrast to the control subscale which emphasizes “rules” and being “punished”, the items related to the warmth subscale and the items related to the psychological autonomy-granting subscale refer to positive aspects of children’s relationships with their parents. The warmth subscale makes reference to “help”, “praise”, “fun” and being “happy”; the autonomy-granting subscale refers to other aspects of relationships that may be perceived as positive: making “decisions for myself”, “thinking for myself” and “freedom”. In this respect, the correlation between two parenting style subscales may be accounted for by the positive nature of the items on each of these subscales.

Participant parenting style and moral orientation subscales. Insofar as the parenting style subscales were expected to be positively related to moral development, it necessarily follows that the subscales of parenting style would be related to the subscales of moral development. In terms of the participants’ parenting style subscales (control, warmth, autonomy-granting) and the participants’ moral orientation subscales (justice, care, preconventional, conventional), several findings were expected: (a) parental control was expected to be positively related to justice scores, insofar as both parental control and

justice emphasize rules and interpersonal responsibilities; (b) parental warmth was predicted to be positively correlated with care scores, in the sense that both focus upon responsiveness to the needs of others; (c) psychological autonomy-granting was hypothesized to be positively correlated with care scores, insofar as allowing children the freedom to make their own decisions, act upon them and learn from the interpersonal sequelae provides a forum to advance their sensitivity to the needs of others; (d) parental control was predicted to be positively correlated with the conventional moral orientation as parental control is argued to foster the awareness of social conventions associated with the conventional level of moral reasoning; (e) parental control was hypothesized to be negatively related to the preconventional level of moral reasoning, wherein children emphasize the avoidance of punishment and the gratification of their own needs; (f) parental warmth was expected to be positively associated with the conventional moral orientation, as warmth is argued to promote an awareness of the importance of being responsive to the needs of others; and (g) autonomy-granting was hypothesized to be positively related to conventional reasoning and negatively correlated with preconventional moral reasoning as it affords children the latitude to choose how they respond to everyday problems, allowing them to integrate morality as a result of the consequences of their behaviours to themselves and others. In sum, several relations were expected between parenting style and the each of the two dimensions of moral orientation (quality, level).

Results from these analyses, which are indicated in Table 3, reveal: (1) a negative trend for the correlation between parental control and children's justice scores, (2) a

positive relational trend in the correlation between parental autonomy-granting and children's care scores, (3) a positive relational trend between parental control and preconventional ratings, and (4) a positive relational trend between parental warmth and preconventional ratings, and (5) a negative association between parental autonomy-granting and conventional ratings. Result (2) provides support for the hypothesis that psychological autonomy-granting allows children the freedom to make their own decisions, to act upon them and learn from the consequences of their actions, thereby advancing their moral development (i.e., hypothesis (c) above). Results (1), (3), (4) and (5), however, appear to run counter to the initial expectations and are discussed below.

Upon closer inspection of the above findings, it appears that the results which run counter to the hypotheses may be better accounted for by mechanisms other than those originally proposed. First, the presence of a negative relational trend between parental control and justice suggests that the more children are perceived by others as possessing an *unjust* interactional style (i.e., one which lacks *fairness* or *equality* in the consideration of the rights of others), the more they experience their parents as controlling. Second, the positive correlational trend between parental control and the preconventional moral orientation indicates that the more children endorse responses which are consistent with obedience, the avoidance of punishment, and the gratification of instrumental needs, the more they perceive their parents as having expectations of them which are enforced through punishment. Third, the positive correlation between parental warmth and the preconventional moral orientation reveals that the more children perceive their parents as being helpful, congratulatory of good performance and "fun" to spend time with, the



more they tend to endorse being obedient, avoiding punishment, and the gratification of instrumental needs. The positive correlation between parental warmth and the preconventional moral orientation may also be accounted for by the fact that the warmth-related items on the PSI-III (see Appendix F) emphasize the gratification of needs which may be salient to individuals who conceive of moral dilemmas in a preconventional manner (e.g., receiving “praise”, receiving “help”, having “fun”). Accordingly, the warmth and preconventional subscales may account for some of the same variance.

Result (5) appears to indicate that the more children perceive their parents as allowing and encouraging of them to think and make decisions for themselves, the less they endorse obligations, stereotypical conceptions of good persons, and respect for rules and authority. The negative correlation between parental autonomy-granting and conventional reasoning may, therefore, reflect that children who are granted a high degree of autonomy during early adolescence do not possess the necessary cognitive abilities, willingness, or ability to structure in a beneficial manner the added opportunities for self-determination afforded by greater autonomy. That is, early adolescents’ awareness of social conventions and respect for rules and authority, which Kohlberg (1963) argued were a feature of conventional moral reasoning, may not be fostered by the allowance of too much autonomy. This finding suggests that Piaget’s (1932) assertion that the emergence of concrete operational thinking leads children to act morally due to a spontaneous interest in helping others and an emerging ability to take the perspective of others may require the added caveat that is particularly true when early adolescents are provided with limits for their behaviours. In short, moral development appears to be

promoted to a greater extent when the emergence of concrete operational thinking is accompanied by age-appropriate limitations upon children's psychological autonomy.

In sum, the more children perceive their households as being high-control, the less they are perceived by classmates as promoting fairness, equality or justice and the more they appear to form judgements of moral dilemmas based upon obedience, avoidance of punishment, and instrumental needs. The results of the relations between psychological autonomy-granting and moral development, however, seem somewhat equivocal. In comparison to their peers, children who reported relatively higher levels of psychological autonomy-granting by their parents were perceived by their peers as more caring. Their endorsements of responses to moral dilemmas, however, indicate that they favour conventional responses rather less than their peers. As such, psychological autonomy-granting by parents appears to be related to a more caring demeanor, yet a lesser endorsement of social conventions (rules). Moreover, parental warmth appears to be related to a greater endorsement of responses to moral dilemmas which reflect obedience, the avoidance of punishment, and an emphasis on the gratification of one's own needs. In this respect, parental warmth seems not to be related to the endorsement of social conventions, but rather to less advanced moral orientations in which the child emphasizes his or her individual needs.

In addition to the above findings from correlational analyses, significant results were found when the dimensions of moral orientation (quality, level) were contrasted across parenting groups. For the quality dimension of moral orientation, several findings emerged for the justice and care subscales. In terms of justice, children in the permissive

group were perceived as significantly more just than children in the authoritarian group, and children in the permissive group were also perceived as significantly more just than children in the authoritative group. When the negative relation between parental control and justice is considered, this result runs counter to the hypothesis that high parental control promotes moral development (i.e., a more advanced moral orientation). As for parental psychological autonomy-granting, it seems that the granting of a high degree of autonomy to children may, in fact, hinder moral development. Although it was initially expected that children would develop morally as a result of the added social interactions afforded by greater autonomy, this does not appear to be the case.

#### Analyses of Participants and their Friends

The second part of the hypothesis, concerning the selection of friends, predicted that children would report seeking out other similarly morally developed children. According to Byrne & Griffitt (1973), children select their friends on the basis of perceived similarities between themselves and other children. Among the bases of perceived similarity that children employ in the selection of friends is the social orientation (prosocial or antisocial) of the child. Moreover, the degree to which a child is prosocial or antisocial is also argued to be an implicit marker of his or her level of moral development. Consequently, it was posited that children would select each other as friends based upon the similarity of their levels of moral development (i.e., the similarity of their moral orientations). Moreover, due to the relation expected between parenting style and moral development, it was expected that friends would attribute similar ratings to their parents on the parenting style subscales.

Correlations between parenting style subscales of participants and friends. As previously mentioned, it was predicted that each of the participants' parenting style subscales would be positively correlated with the corresponding parenting style subscale of participants' friends. Results from the correlational analyses of these subscales (see Table 8) indicated that, as expected, participants' ratings of parental control were positively correlated with their friends' ratings of parental control. This finding may indicate that the aspect of friend selection which is related to parental control may operate according to the similarity-attraction hypothesis.

The correlation between participants' ratings of parental warmth and participants' friends' ratings of parental warmth, however, did not support the similarity-attraction hypothesis. In contrast to the expected positive correlation between these ratings, the correlation between participants' ratings of parental warmth and participants' friends' ratings of parental warmth were negatively correlated. This finding suggests that for the aspect of childhood friend selection which is related to parental warmth, attraction may not be based upon similarity, but rather upon complementarity. That is, children from high-warmth homes may, in fact, befriend those who are from low-warmth homes.

The other significant finding from the correlational analyses of the parenting style subscales of participants and the parenting style subscales of their friends was the negative correlation found between participants' ratings of parental warmth and their friends' ratings of parental autonomy-granting (see Table 8). When considered in light of the positive correlation between parental warmth and psychological autonomy-granting (see Table 1), the above negative correlation between participant ratings of parental

warmth and their friends' ratings of parental autonomy-granting suggests that participants' ratings of parental warmth would also be negatively correlated with their friends' ratings of parental autonomy-granting. That is, children who perceive their parents as high-warmth seem to befriend children who perceive their parents as low-warmth. This finding reconfirms the negative correlation mentioned in the preceding paragraph between participant ratings of parental warmth and their friends' ratings of parental warmth. In sum, although the negative correlation between participants' ratings of parental warmth and their friends' ratings of parental autonomy-granting was not predicted, it supports the contention that, in terms of the parental warmth dimension, children may be attracted on the basis of complementarity.

#### Correlations between moral orientation subscales of participants and friends.

Once again in reference to the similarity-attraction hypothesis (Byrne & Griffitt, 1973), it was hypothesized that the moral development of children and their friends would be similar. That is, children and their friends were expected to be similarly just and caring and that the degree to which they would endorse preconventional and conventional responses was also expected to be similar. No significant correlations were found between children's care, preconventional and conventional subscales of moral development and the care, preconventional and conventional subscales of moral development of their friends. The only finding from the correlational analyses of the moral orientation *quality* and moral orientation *level* subscales of participants and those of their friends indicated a trend for the justice scores of children and their friends. That is, the more a child is perceived by peers as *just* (i.e., promoting of fairness and equality),

the more that a child's friends also tend to be perceived by peers as just. Whether or not this positive correlation reflects that both individuals in the friendship are more *just* or that, by virtue of befriending a just individual, a less *just* individual comes to be perceived by peers as more *just*, is not clear.

Friends' moral orientation as a function of participant characteristics. This section of the analyses was divided into two sections to separately examine friends' moral orientation *quality* as a function of participant characteristics and friends' moral orientation *level* as a function of participant characteristics. The first of these analyses, which analysed the moral orientation *quality* of participants' friends as a function of participant parenting group, participant sex and participant friendship condition, revealed several findings related to participant sex and participant parenting group. In terms of findings related to the sex of participants, there were no significant differences in the justice or care scores of boys' friends across the boys' parenting groups. For girls, however, several significant results emerged: (a) the justice scores of the friends of girls in the authoritarian group were significantly higher than the justice scores of the friends of girls from any of the other parenting groups, (b) the care scores of the friends of girls in the neglectful group were significantly higher than the care scores of the friends of girls in either of the authoritarian or authoritative groups, (c) the care scores of the friends of girls in the permissive group were significantly higher than the care scores of the friends of girls in the authoritative group. In terms of the simple effects analyses of parenting groups, several findings emerged: (d) the friends of both boys and girls in the authoritarian group were significantly more just than caring, (e) the friends of girls in the

neglectful group were significantly more caring than just, and (f) the friends of boys in the neglectful group were significantly more just than the friends of girls in the neglectful group.

The above findings indicate that regardless of which parenting group boys belong to, the degree to which the friends they keep are perceived as just and caring relative to other boys in the class does not appear to vary. The situation for girls appears to be quite different, however, in that the results for girls need to be interpreted with a caveat in mind: the number of girls in the authoritarian parenting group who had a mutually-nominated friend was only four. Consequently, despite having friends whose justice scores were significantly higher than the justice scores of the friends of girls from the other three parenting groups, it is possible that this significant difference is an artifact of the small cell-size. Should this result not be artifactual, however, it appears that girls in the authoritarian group befriend girls who receive significantly more justice nominations than the friends of girls from other parenting groups. When the low justice scores of individuals in the authoritarian group (see Figure 1) are contrasted with the high justice scores of the friends of girls in the authoritarian group (see Figure 3), it appears that girls in the authoritarian group befriend other girls partly on the basis of the complementarity of their justice scores. That is, authoritarian girls, who are perceived as relatively unjust (i.e., unfair and non-promoting of equality) by their classmates, appear to befriend the girls in the class who are perceived as among the most just.

In addition to the finding for the justice scores of girls' friends, a significant finding was found for the care scores of girls' friends. The friends of girls from the

neglectful group were significantly more caring than the friends of girls from either of the authoritarian or authoritative groups. The friends of girls from the permissive group were also significantly higher in care than those of the friends of girls from the authoritative group. By definition, girls in the neglectful group characterize their parents as low-warmth, yet they befriend girls who are perceived as significantly more caring than the friends of girls belonging to two of the other three parenting groups. Although the relatively high care scores for individuals in the neglectful group (see Figure 1) and the high care scores of the friends of girls in the neglectful group (see Figure 3) preclude the conclusion that girls in the neglectful group befriend other girls on the basis of complementary levels of care, it may be that girls in the neglectful group seek to fulfill their need for warmth and care, which they reported receiving little of at home, through their friends.

The second series of analyses in this section was directed toward determining friends' moral orientation *level* as a function of participant parenting group, participant sex and participant friendship condition. Results from these analyses indicated no significant differences in the endorsements of preconventional and conventional responses made by girls' friends across the parenting groups. The friends of boys in the neglectful group, however, endorsed preconventional responses to moral dilemmas significantly more than did the friends of boys in the permissive group. The friends of boys in the neglectful group also endorsed preconventional responses significantly more than they endorsed conventional responses to moral dilemmas. Referring to the endorsements of responses to moral dilemmas made by the boys in the neglectful group



(see Figure 2), the boys in the neglectful group also endorsed preconventional responses significantly more than conventional responses to moral dilemmas. Thus, it appears that boys in the neglectful group endorse preconventional and conventional responses to moral dilemmas in a similar manner to their friends. In sum, boys who perceive their parents as low-control and low-warmth, endorse responses to moral dilemmas which reflect considerations of obedience, the avoidance of punishment, and the gratification of instrumental needs more than they endorse responses which reflect considerations of social obligations, stereotypical conceptions of good persons, and respect for rules and authority. The friends of these boys appear to respond to moral dilemmas in a similar manner.

Friends' parenting style as a function of participant characteristics. The last section of the analyses investigated differences in the ratings of parental control, parental warmth and parental autonomy-granting made by participants' friends as a function of participant parenting group and participant sex. The first of these analyses, that for friends' ratings of parental control as a function of participant parenting group and participant sex, revealed that the friends of girls rated their parents as significantly more controlling than did the friends of boys. This sex difference in friends' ratings of parental control may reflect: (a) sex differences in the degree to which girls and boys perceive parental control, (b) an actual sex difference, wherein parents have more expectations of their daughters than their sons, or (c) a sex difference in both the perceptions and the expectations of boys and girls.

The second analysis investigated differences in friends' ratings of parental warmth

as a function of participant parenting group and participant sex. Results from this analysis revealed that the friends of children in the neglectful group rate their parents as significantly higher in warmth than do the friends of children in the authoritative group. According to the definition of the parenting groups, children in the neglectful group perceive their homes as low-warmth, whereas children in the authoritative group perceive their homes as high-warmth. This finding reconfirms the contention that children who perceive their homes as low-warmth (i.e., children in the neglectful group) befriend individuals who characterize their homes as high-warmth. Thus, it appears that for the aspect of childhood friend selection which is related to parental warmth, children are attracted to each other on the basis of complementarity.

The third analysis investigated differences in friends' ratings of parental autonomy-granting as a function of participant parenting group and participant sex. Results from this analysis revealed that the friends of children in the neglectful group rate their parents as significantly more granting of psychological autonomy than do the friends of children from the authoritative group. Due to the strong correlation between the parental warmth subscale and the parental autonomy-granting subscale this finding appears to approximate that found for parental warmth.

### Conclusions

The findings of this study support the following conclusions: (a) parental psychological autonomy-granting is related to care in children;(b) the *quality* of children's moral development (justice, care) varies significantly across parenting styles; (c) girls and their female friends endorse the conventional *level* more than the preconventional *level* of

moral development; (d) boys who perceive their homes as low-warmth and low-control homes and their male friends endorse the preconventional *level* more than the conventional *level* of moral development; (e) girls whose perceive their parents as low-warmth and high-control befriend girls who are significantly more just than the friends of other girls; (f) the friends of girls who perceive their parents as low-warmth and low-control befriend girls who are significantly more caring than the friends of other girls; (g) children select their friends based upon the similarity of the parental control levels in their respective homes; and (h) children select their friends based upon the complementarity of the parental warmth levels in their respective homes.

Therefore, these results call into question the validity of the similarity-attraction hypothesis (Byrne & Griffitt, 1973) as the primary basis of predicting early adolescent friend selection. It appears that early adolescent friend selection may rely upon attraction due to the complementarity of individuals' characteristics as well. Moreover, it appears that friend selection is related to the key dimensions of parenting style, parental responsiveness and parental demandingness.

### Limitations

Several shortcomings are noteworthy in the current investigation. First, the measure designed to assess the parenting style is based upon a self-report technique and consequently may not accurately reflect the parenting style actually used in the home. This may particularly be the case for children from authoritative homes where both parental warmth and parental control are high. These parents likely want to convey their warmth (responsiveness) to their children; consequently, their children would perceive

their parents' warmth. These same parents, despite being high-control, may not wish to convey the full extent of their control. That is, these parents would seek to control the behaviours of their children, yet they would attempt to convey this control in a more indirect or subtle manner to their children in contrast to the more overt manner used to convey responsiveness. Consequently, while children's perceptions of warmth may be an accurate reflection of the emotional climate of their homes, children's perceptions of control may not reflect the true degree of control (demandingness) exerted by their parents. In this respect, while the distinctions between parenting groups represent different levels of warmth (low, high) and different levels of control (low, high) they may not be exact indexes of the parenting style to which was Baumrind was referring.

A second limitation of this study lies in the technique used to determine the moral orientation *quality* of children. The nomination technique used herein limits the number of nominations for each justice and care item to one same-sex and one other-sex classmate and, consequently, individuals who may be *just* and *caring* (but are perceived as less so than the individuals who receive the nominations) do not receive the number of nominations which they merit. As a result, the justice and care scores of some individuals may underestimate their actual levels of justice and care. In order to increase the accuracy of justice and care scores it would be worthwhile to first, include more nomination items and second, to accompany the nomination technique by a rating technique whereby children rate the levels of justice and care of their classmates using a Likert-type scale.

In terms of more general limitations, the bulk of the literature related to the

measurement of friendship for the adolescent age group is based upon data collected by means of peer nominations. Typically, children's friendship nominations are restricted to circumscribed groups of individuals such as those in their classroom, grade or school. Moreover, even when restricted to classroom, friendship nominations are often limited to same-sex peers. As such, indexes of friendship may be under- or over-estimated. For example, the friendships of children whose friends who are other-sex or attend another class in the same school are often not considered. Although methodologies (such as peer nomination) conducted in this manner offer a pragmatic way of determining whether friendship nominations are reciprocated, this assessment approach is not without its shortcomings.

With these issues in mind, avenues for future research are discussed. Further research is required to elucidate the nature of the relationship between parenting style and moral development. While links between these constructs were identified in the current study, it would be beneficial to further elucidate the relationship between the subscales of each of these constructs.

The issue of friend selection requires further investigation to clarify which dimensions of children's moral development (quality, level) contribute to friend selection on the basis of similarity, and which aspects of children's moral development contribute to friend selection on the basis of complementarity. Moreover, in terms of similarity and complementarity, additional investigations are required to assess the replicability of the findings related to friend selection on the basis of similar parental control levels and complementary parental warmth levels.

Finally, further research is required to better understand the links between parenting style and sex differences in friend selection. Specifically, the friend choices of boys who perceive their parents as low in warmth/low in control, and girls who perceive their parents as low in warmth/high in control, appear to stand apart from their peers. Shedding light on these and other issue remains a central goal within the realm of moral development and its interface with friendship selection.

## References

Aristotle (1998). *Nicomachean Ethics Unabridged*. In P. Negri (Gen. Ed.) & W. Kaufman (Vol. Ed.), *Dover Thrift Editions*. Toronto: General Publishing Company, Ltd.

Azrak, R. C. (1978). Parental discipline and early adolescent moral development. *Dissertation Abstracts International*, 39, 2747-2748.

Bagwell, C., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendships and peer rejection as predictors of adult adjustment. *Child Development*, 69, 140-153.

Barber, B., Olsen, J., & Shagle, S. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. *Child Development*, 65, 1120-1136.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic psychology monographs*, 75, 43-88.

Baumrind, D. (1978). Parental disciplinary patterns and social competence in children. *Youth and Society*, 9, 239-276.

Baumrind, D. (1988). Rearing competent children. In W. Damon (Ed.), *Child development today and tomorrow* (pp. 329-378). San Francisco: Jossey-Bass.

Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development*, 53, 1447-1460.

Bigelow, B. J. (1977). Children's friendship expectations: A cognitive-developmental study. *Child Development*, 48, 246-253.

Blum, L. (1980). *Friendship, altruism, and morality*. London: Routledge and Kegan Paul.

Boyes, M. C., & Allen, S. G. (1993). Styles of parent-child interaction and moral reasoning in adolescence. *Merrill-Palmer Quarterly*, 39, 551-570.

Brown, B. B., Mounts, N., Lamborn, S. D., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. *Child Development*, 64, 467-482.

Bukowski, W. M., & Hoza, B. (1989). Popularity and friendship: Issues in theory, measurement, and outcome. In T. J. Berndt & G. W. Ladd (Eds.), *Peer Relationships in Child Development: Wiley Series on Personality Processes* (pp. 15-45). New York: Wiley.

Bukowski, W.M., Newcomb, A. F., & Hartup, W. M. (1996). Friendships and their significance in childhood and adolescence: Introduction and comment. In W. M. Bukowski, A. F. Newcomb, & W. M. Hartup (Eds.), *The company they keep: Friendship during childhood and adolescence. Cambridge studies in social and emotional development* (pp. 1-15). New York: Cambridge University Press.

Bukowski, W. M., Newcomb, A. F., & Hoza, B. (1987). Friendship conceptions among early adolescents: A longitudinal study of stability and change. *Journal of Early Adolescence*, 7, 143-152.

Bukowski, W. M., & Sippola, L. (1996). Friendship and morality: (How) are they related? In W. M. Bukowski, A. F. Newcomb, & W. M. Hartup (Eds.), *The company they keep: Friendship during childhood and adolescence. Cambridge studies in social and emotional development* (pp. 238-261). New York: Cambridge University Press.

Bukowski, W. M., Sippola, L., Hoza, B., & Newcomb, A. F. (1994). Using rating scale and nomination techniques to measure friendship and popularity. *Journal of Social and Personal Relationships*, 11, 485-488.

Byrne, D., & Griffitt, W. (1973). Interpersonal attraction. *Annual Review of Psychology*, 24, 317-336.

Coie, J.D. & Dodge, K.A. (1998). Aggression and antisocial behavior. In W. Damon & N. Eisenberg (Eds.), *The handbook of child psychology*. New York: Wiley.

Damon, W. (1977). *The social world of the child*. San Francisco: Jossey-Bass.

Freud, S. (1959). Some psychical consequences of the anatomical distinction between the sexes. In S. Freud (Ed.), *Collected papers* (pp. 186-197). New York: Basic Books.

Fuligni, A., & Eccles, J. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology*, 29, 622-632.

Gilligan, C. (1977). In a different voice: Women's conceptions of self and of morality. *Harvard Educational Review*, 47, 481-517.



Gilligan, C. (1982). *In a different voice*. Cambridge, MA: Harvard University Press.

Gilligan, C. (1988). Remapping the moral domain: New images of self in relationship. In C. Gilligan, J. V. Ward, & J. M. Taylor (Eds.), *Mapping the moral domain: A contribution of women's thinking to psychological theory and education* (pp. 1-19). Boston, MA: Harvard University Press.

Hart, D., & Atkins, R. (1998). Urban America as a context for the development of moral identity in adolescence. *Journal of Social Issues, 54*, 513-530.

Hartup, W. W. (1996). Cooperation, close relationships, and cognitive development. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendship during childhood and adolescence. Cambridge studies in social and emotional development* (pp. 213-237). New York: Cambridge University Press.

Hartup, W. W., & Stevens, N. (1997). Friendship and adaptation in the life course. *Psychological Bulletin, 121*, 355-370.

Hill, J. (1980). The family. In M. Johnson (Ed.), *Toward adolescence: The middle school years (Seventy-ninth year-book of the National Society for the Study of Education)*. Chicago: University of Chicago Press.

Hoffman, M. L. (1963). Childrearing practices and moral development: Generalizations from empirical research. *Child Development, 34*, 295-318.

Hoffman, M. L. (1970). Moral development. In P. H. Mussen (Ed.), *Carmichael's manual of child psychology* (Vol. 2, pp. 261-359). New York: Wiley.

Hoffman, M. L., & Saltzstein, H. D. (1967). Parent discipline and the child's moral development. *Journal of Personality and Social Psychology, 5*, 45-57.

Kandel, D. B. (1978a). Homophily, selection, and socialization in adolescent friendships. *American Journal of Sociology, 84*, 427-436.

Kandel, D. B. (1978b). Similarity in real-life adolescent friendship pairs. *Journal of Personality and Social Psychology, 36*, 306-312.

Kohlberg, L. (1963). Moral development and identification. In H. W. Stevenson (Ed.), *Child Psychology: 62nd yearbook of the National Society for the Study of Education* (pp. 277-332). Chicago: University of Chicago Press.

Kohlberg, L. (1964). Development of moral character and moral ideology. In M. L. Hoffman & L. W. Hoffman (Eds.), *Review of child development research* (Vol. 1, pp. 283-432). New York: Sage.

Kohlberg, L. (1968). The child as a moral philosopher. *Psychology Today*, 2, 25-30.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347-480). Chicago: Rand McNally.

Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, research, and social issues*. New York: Holt, Rinehart & Winston.

Kohlberg, L. (1984). *Essays on moral development. Vol. 2: The psychology of moral development*. San Francisco: Harper & Row.

Kohlberg, L. (1985). The just community approach to moral education in theory and practice. In M. W. Berkowitz & F. Oser (Eds.), *Moral education: Theory and application*. Hillsdale, NJ: Erlbaum.

Kohlberg, L., & Diessner, R. (1991). A cognitive-developmental approach to moral attachment. In J. L. Gewirtz & W. M. Kurtines (Eds.), *Intersections with attachment*. Hillsdale, NJ: Erlbaum.

Lamborn, S., Mounts, N., Steinberg, L., & Dornbush, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent and neglectful families. *Child Development*, 62, 1049-1065.

Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In E. M. Hetherington (Ed.), *Handbook of child psychology: Socialization, personality, and social development*, Vol. 4. New York: Wiley.

MacIntyre, A. (1981). *After virtue*. Notre Dame: University of Notre Dame.

Piaget, J. (1932). *The moral judgment of the child*. London: Routledge.

Pratt, M. W., Arnold, M. L., Pratt, A. T., & Diessner, R. (1999). Predicting adolescent moral reasoning from family climate: A longitudinal study. *The Journal of Early Adolescence*, 19, 148-175.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (1998). Peer interactions, relationships, and groups. In W. Damon (Ser. Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of Child Psychology* (5<sup>th</sup> ed.) (pp. 633-652). New York: Wiley.

Sears, R. R., Maccoby, E. E., & Levin, M. (1957). *Patterns of child reasoning*. Evanston, IL: Row-Peterson.

Shantz, D. W. (1986). Conflict, aggression and peer status: An observational study. *Child Development*, 57, 1322-1332.

Sippola, L. K. (1995). *Care and Justice: The moral dimensions of adolescents' relations with peers and friends*. Unpublished doctoral dissertation, Concordia University, Montreal, Canada.

Skinner, B. F. (1971). *Beyond Freedom and Dignity*. New York: Knopf.

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. Feldman and G. Elliott (Eds.), *At the threshold: The developing adolescent*. Cambridge, MA: Harvard University Press.

Steinberg, L. (1996). *Adolescence* (4<sup>th</sup> ed.). New York: McGraw-Hill.

Steinberg, L., Lamborn, S., Darling, N., Mounts, N., & Dornbush, S. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 65, 754-770.

Steinberg, L., Mounts, N., Lamborn, S., & Dornbush, S. (1991). Authoritative parenting and adolescent adjustment across various ecological niches. *Journal of Research on Adolescence*, 1, 19-36.

Sullivan, H. S. (1953). *The Interpersonal Theory of Psychiatry*. New York: Norton.

Turiel, E. (1998). The development of morality. In W. Damon (Ser. Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of Child Psychology* (5<sup>th</sup> ed.) (pp. 863-932). New York: Wiley.

Waldrop, M. F., & Halverson, C. F. (1975). Intensive and extensive peer behavior: Longitudinal and cross-sectional analyses. *Child Development*, 46, 19-26.

Walker, L. J. (1988). The development of moral reasoning. *Annals of Child Development*, 5, 33-78.

Walker, L. J., & Taylor, J. H. (1991). Family interactions and the development of moral reasoning. *Child Development*, 62, 264-283.

**Appendix A**

**Solicitation Letter / Parental Permission Form**

April 30, 2001

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 children's relationships with their parents and peers affect their feelings about themselves. I am writing to tell you about a study I am conducting with fifth-, and sixth-grade students at Our Lady of Peace School. This study will help us learn more about children and their development.

As part of the study I am conducting, I will meet with the participating children in their school and ask them to complete a set of questionnaires about how young people and families solve problems. In these questions the children will be asked to tell us about (a) who they typically associate with in school, (b) whether or not the other participating children in the class have particular characteristics, (c) how decisions are made in their families, and (d) how they might solve problems that would come up in their relations with their peers at school. All the questionnaires will be completed at the child's desk in school and none of the other children will know how any other child has answered the questions.

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 children's normal daily lives. It is not a "treatment study" and 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 entirely voluntary. Your child is not required to take part; 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.

If you have any questions, please call me at 848-2184, send me a letter at Department of Psychology, Concordia University, 7141 rue Sherbrooke Ouest, Montreal, Quebec H4B 1R6, or e-mail me at [bukowsk@vax2.concordia.ca](mailto:bukowsk@vax2.concordia.ca).

Please fill out the attached form and have your child return it to his/her teacher tomorrow.

As an incentive for the children to return the permission slip, any child who returns a slip, regardless of whether her/his parent has given permission for participation, will be part of a drawing. There will be three winners, one from each class. The winners will receive free tickets to a movie at a cinema in your area. Also all children who participate in the study will receive a \$5.00 certificate toward the purchase of a ticket to a movie at a theatre in the Laval region.

Thank you for your help. We very much appreciate it.

Sincerely,

William M. Bukowski  
Professor

**Concordia Study  
(Grades 5 & 6)  
SPRING 2001**

**PERMISSION SLIP**

Please read and sign the following:

"I understand that I am being asked if my daughter/son can take part in a research study conducted by Dr. W. M. Bukowski and Mr. R. Miners. I know that the purpose of the study is to examine how social relations with parents and peers affect how children behave and think about themselves. I know that if my daughter/son participates she/he will be asked to answer some questionnaires at her/his desk in the classroom. I have been told that questionnaires are about the social relations of young people and how they think and feel about themselves and their friends. I know that my daughter/son does not have to participate in the study, and that even if she/he starts to take part in it, she/he can quit at any time. I also know that all answers will remain confidential and will NOT be shown to anyone. Only Dr. Bukowski and his assistants will know what is in the questionnaires."

Please check one of the following and ask your daughter/son to bring this permission slip into the homeroom teacher tomorrow.

\_\_\_\_\_ My daughter/son has my permission to take part in Dr. Bukowski's study.

\_\_\_\_\_ My daughter/son does not have my permission to take part in Dr. Bukowski's study.

(SIGN) \_\_\_\_\_ DATE: \_\_\_\_\_

Child's Name \_\_\_\_\_

Appendix B

Child Consent Form

**Concordia Study  
SIR WILFRID LAURIER SCHOOL BOARD  
SPRING 2001**

Name \_\_\_\_\_

Male \_\_\_\_ Female \_\_\_\_ Age \_\_\_\_

GRADE: \_\_\_\_\_

HOMEROOM: \_\_\_\_\_

Please read and sign the following if you wish to participate in the study:

"I understand that I have been asked to be in a research study that Dr. W. M. Bukowski and Mr. Richard Miners are doing about how young people feel about themselves and how they get along with others.

I know that if I will be asked to answer some questionnaires in class. I know that I do not have to participate in the study, and that even if I start to take part in it, I can quit at any time. I also know that all answers will be kept confidential and will NOT be shown to anyone. Only Dr. Bukowski and Mr. Miners and their assistants will know my answers."

(SIGN) \_\_\_\_\_

DATE: \_\_\_\_\_



**Appendix C**  
**Sample Questionnaire**

**WHO ARE YOUR FRIENDS? (Boys' Form)**

**FIRST WE WOULD LIKE TO KNOW WHO YOU ARE FRIENDS WITH AND WHO YOU LIKE TO SPEND TIME WITH.**

**Pick the names of the students in your class who are your best friends from the list below.**

**Write their names on the lines below putting your best friend on the first line, second best friend on the second line and so on.**

**You can list as many or as few students as you like, but the names you choose must be from the list below.**

**Put the names of the boys who are your friends in one list and the names of the girls who are your friend in the other list.**

**BE SURE TO WRITE THE FIRST AND LAST NAMES:**

**BOYS**

**GIRLS**

1st friend: \_\_\_\_\_

1st friend \_\_\_\_\_

2nd friend: \_\_\_\_\_

2<sup>nd</sup> friend \_\_\_\_\_

3rd friend: \_\_\_\_\_

3rd friend \_\_\_\_\_

4th friend: \_\_\_\_\_

4th friend \_\_\_\_\_

**Choose from this list:**

Child 1

Child 6

Child 11

Child 2

Child 7

Child 12

Child 3

Child 8

Child 13

Child 4

Child 9

Child 14

Child 5

Child 10

Child 15

**WHO ARE YOUR FRIENDS? (Girls' Form)**

***FIRST WE WOULD LIKE TO KNOW WHO YOU ARE FRIENDS WITH AND WHO YOU LIKE TO SPEND TIME WITH.***

**Pick the names of the students in your class who are your best friends from the list below.**

**Write their names on the lines below putting your best friend on the first line, second best friend on the second line and so on.**

**You can list as many or as few students as you like, but the names you choose must be from the list below.**

**Put the names of the girls who are your friends in one list and the names of the boys who are your friends in the other list.**

**BE SURE TO WRITE THE FIRST AND LAST NAMES:**

**GIRLS**

**BOYS**

1st friend: \_\_\_\_\_

1st friend \_\_\_\_\_

2nd friend: \_\_\_\_\_

2<sup>nd</sup> friend \_\_\_\_\_

3rd friend: \_\_\_\_\_

3rd friend \_\_\_\_\_

4th friend: \_\_\_\_\_

4th friend \_\_\_\_\_

**Choose from this list:**

Child 1  
Child 2  
Child 3  
Child 4  
Child 5

Child 6  
Child 7  
Child 8  
Child 9  
Child 10

Child 11  
Child 12  
Child 13  
Child 14  
Child 15

**NOW WE WOULD LIKE TO KNOW HOW MUCH YOU LIKE THE OTHER PEOPLE IN YOUR CLASS AT SCHOOL.**

**BESIDE EACH PERSON'S NAME YOU WILL SEE A SCALE THAT GOES FROM 1 TO 5.**

**CIRCLE THE NUMBER THAT BEST REPRESENTS HOW MUCH YOU LIKE EACH PERSON. ON THIS SCALE:**

**"1" MEANS YOU DO NOT LIKE THE PERSON**

**"2" MEANS YOU USUALLY DO NOT LIKE THE PERSON**

**"3" MEANS YOU SORT OF LIKE THIS PERSON**

**"4" MEAN YOU USUALLY LIKE THIS PERSON**

**"5" MEANS YOU LIKE THE PERSON VERY MUCH.**

Child 1	1-----2-----3-----4-----5
Child 2	1-----2-----3-----4-----5
Child 3	1-----2-----3-----4-----5
Child 4	1-----2-----3-----4-----5
Child 5	1-----2-----3-----4-----5
Child 6	1-----2-----3-----4-----5
Child 7	1-----2-----3-----4-----5
Child 8	1-----2-----3-----4-----5
Child 9	1-----2-----3-----4-----5
Child 10	1-----2-----3-----4-----5
Child 11	1-----2-----3-----4-----5
Child 12	1-----2-----3-----4-----5
Child 13	1-----2-----3-----4-----5
Child 14	1-----2-----3-----4-----5
Child 15	1-----2-----3-----4-----5

**WHAT ARE THEY LIKE?** (Boys' Form)

***Instructions: Below you will see several different characteristics. After each one there are some blank lines. In the blank lines put the names of the boy and the girl WHO BEST FIT THESE CHARACTERISTICS. ONLY USE NAMES THAT ARE ON THE LIST.***

1. Someone who is good at sports. Boy: \_\_\_\_\_

Girl: \_\_\_\_\_

2. Someone who is a good leader. Boy: \_\_\_\_\_

Girl: \_\_\_\_\_

3. Someone who plays fairly. Boy: \_\_\_\_\_

Girl: \_\_\_\_\_

4. Someone who cares about others. Boy: \_\_\_\_\_

Girl: \_\_\_\_\_

5. Someone who makes sure that everyone is treated equally. Boy: \_\_\_\_\_

Girl: \_\_\_\_\_

6. Someone who helps others when they need it. Boy: \_\_\_\_\_

Girl: \_\_\_\_\_

**Choose from this list:**

Child 1  
Child 2  
Child 3  
Child 4  
Child 5  
Child 6  
Child 7  
Child 8

Child 9  
Child 10  
Child 11  
Child 12  
Child 13  
Child 14  
Child 15

**WHAT ARE THEY LIKE?** (Girls' Form)

***Instructions: Below you will see several different characteristics. After each one there are some blank lines. In the blank lines put the names of the girl and the boy WHO BEST FIT THESE CHARACTERISTICS. ONLY USE NAMES THAT ARE ON THE LIST.***

1. Someone who is good at sports. Girl: \_\_\_\_\_  
Boy: \_\_\_\_\_
2. Someone who is a good leader. Girl: \_\_\_\_\_  
Boy: \_\_\_\_\_
3. Someone who plays fairly. Girl: \_\_\_\_\_  
Boy: \_\_\_\_\_
4. Someone who cares about others. Girl: \_\_\_\_\_  
Boy: \_\_\_\_\_
5. Someone who makes sure that everyone is treated equally. Girl: \_\_\_\_\_  
Boy: \_\_\_\_\_
6. Someone who helps others when they need it. Girl: \_\_\_\_\_  
Boy: \_\_\_\_\_

**Choose from this list:**

- |         |          |
|---------|----------|
| Child 1 | Child 9  |
| Child 2 | Child 10 |
| Child 3 | Child 11 |
| Child 4 | Child 12 |
| Child 5 | Child 13 |
| Child 6 | Child 14 |
| Child 7 | Child 15 |
| Child 8 |          |

## **WHAT WOULD YOU DO?**

***In this questionnaire you will read five different stories describing problems that people of your age have experienced. We will do the first one together and then you can go on and finish the others by yourself.***

**● *After the story, you will see a list of items about things that a person may think are important. Please tell us how important each item would be for you in making your decision. Remember, there are no right or wrong ways to answer the questions - you can use any number on the scale.***

***After each sentence there is a scale that goes from 1 to 5.***

***"1" means the sentence is probably not true of what you would do.***

***"2" means that it might be true.***

***"3" means that it is usually true.***

***"4" means that it is very true.***

***"5" means that it is really true of what you would do.***

***Fill in the box on the scale that is best for you. Be sure to read carefully and answer as honestly as possible.***

**● *Then, after you have rated all of the items, you will be asked to choose the item that is the most important consideration out of all of the items. Then you should pick the second most important, the third, the fourth and so on.***

***Please turn to the next page now and listen carefully to our instructions. Please put up your hand up if you have a question.***

**1) Suppose that you are hanging around with some people who your parents think are not good for you. You really like these people and think they are nice, but your parents think that you can make "better" friends. For some reason, your parents just don't like them and they want you to stop seeing these people.**

**What would you do?**

			<i>Importance Ranking</i>
(a)	<i>Stop seeing these people because you will get in trouble with your parents.</i>	<i>Not True</i> 1-----2-----3-----4-----5	<i>Really True</i> 1-----2-----3-----4-----5
(b)	<i>Keep hanging around with these people because you really enjoy their company.</i>	<i>Not True</i> 1-----2-----3-----4-----5	<i>Really True</i> 1-----2-----3-----4-----5
(c)	<i>Keep seeing these people because they will think you're not cool for listening to everything your parents tell you.</i>	<i>Not True</i> 1-----2-----3-----4-----5	<i>Really True</i> 1-----2-----3-----4-----5
(d)	<i>Stop seeing these people because you should spend time with people who do the "right" things.</i>	<i>Not True</i> 1-----2-----3-----4-----5	<i>Really True</i> 1-----2-----3-----4-----5
(e)	<i>Stop seeing them because your parents will be upset or disappointed with you if you don't.</i>	<i>Not True</i> 1-----2-----3-----4-----5	<i>Really True</i> 1-----2-----3-----4-----5
(f)	<i>Keep seeing the people because they are your friends and friends should stick by each other and not give up at the first signs of trouble.</i>	<i>Not True</i> 1-----2-----3-----4-----5	<i>Really True</i> 1-----2-----3-----4-----5

**Now, for the above items, rank each of the items based on how IMPORTANT it would be in helping you to make a decision in this situation. (For example, if an item is the most important put a "1" in the blank space provided on the right-hand side of the page. If it is the second most important item, put a "2" in the blank space provided. If it is the third most important item, put a "3" in the blank space provided and so on.)**



2) Suppose that you have a friend who you have known since you were very little. You do a lot of things with this friend and really enjoy spending time with her/him. Since being in the grade you're now in, however, you've started to meet new people who you also really like but they don't like your old friend very much. They think she/he's a "loser". They tease you when you hang out with her/him and tell you to dump her/him as a friend because it makes you look like a loser too.

**What would you do?**

			<i>Importance Ranking</i>
(a)	<i>Dump your old friend because you'll have more fun with the new friends.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(b)	<i>Keep the old friend because she/he is more fun than the new friends.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(c)	<i>Dump the old friend because the new friends will be mean to you if you don't.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(d)	<i>Keep the old friend because she/he will be upset with you if you don't.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(e)	<i>Keep the old friend because she/he and other people will think that you were never her/his "real" friend if you don't.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(f)	<i>Dump the old friend because if you stick with the old friend the new friends will think you're a loser too.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(g)	<i>Keep the old friend because friends should be loyal to each other.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(h)	<i>Dump the old friend because the new friends should be able to spend time just with you.</i>	Not True 1-----2-----3-----4-----5	Really True _____

**Now, for the above items, rank each of the items based on how IMPORTANT it would be in helping you to make a decision in this situation. (For example, if an item is the most important put a "1" in the blank space provided on the right-hand side of the page. If it is the second most important item, put a "2" in the blank space provided. If it is the third most important item, put a "3" in the blank space provided and so on.)**

3) Suppose one day you are hanging out after school with a large group of your friends near school. You walk into the corner store and one of your friends notices that there is only one staff person working in the whole store. Suddenly, you notice some of your friends stuffing their pockets with things from the store. One of them comes up to you and tells you to go ahead and take what you want. He/she tells you that if the whole gang walks out together, there's no way that the store employee can stop you.  
 What would you do?

			<i>Importance Ranking</i>
(a)	Take the stuff from the store because it will be fun seeing if you can get away with it.	Not True 1-----2-----3-----4-----5	Really True _____
(b)	Take the stuff from the store because you will really enjoy using it later.	Not True 1-----2-----3-----4-----5	Really True _____
(c)	Don't take the stuff from the store because you could get into trouble with your parents and the police.	Not True 1-----2-----3-----4-----5	Really True _____
(d)	Don't take the stuff because the store owner will get really mad at you when he/she finds out.	Not True 1-----2-----3-----4-----5	Really True _____
(e)	Take the things from the store because your friends will think you're a wimp if you don't.	Not True 1-----2-----3-----4-----5	Really True _____
(f)	Don't take the stuff from the store because if you get caught everyone will think that you are a bad kid.	Not True 1-----2-----3-----4-----5	Really True _____
(g)	Don't take the stuff from the store because if everybody started stealing there would be a lot of problems in the world.	Not True 1-----2-----3-----4-----5	Really True _____
(h)	Take the things from the store because friends are supposed to stick together no matter what they do.	Not True 1-----2-----3-----4-----5	Really True _____

Now, for the above items, rank each of the items based on how IMPORTANT it would be in helping you to make a decision in this situation. (For example, if an item is the most important put a "1" in the blank space provided on the right-hand side of the page. If it is the second most important item, put a "2" in the blank space provided and so on.)

**4) Imagine there is a girl/boy in one of your classes who isn't doing very well. The night before a scheduled test in this class, this girl/boy calls you to ask if she/he can cheat from your test. She/he tells you that she has tried to study but just doesn't understand the material. You tell her/him that you will speak to her/him the next day. You don't know this person very well but she/he seems like someone you'd like to develop a friendship with. She/he seems like a nice person who is struggling with her/his homework.**

**What would you do?**

			<i>Importance Ranking</i>
(a)	<i>Let the girl/boy cheat because you will lose a friend if you don't.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(b)	<i>Let her/him cheat because then she/he will let you cheat on some other test.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(c)	<i>Don't let her/him cheat because you could get a "zero" on the test if you're caught.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(d)	<i>Don't let her/him cheat because the teacher will send you to the principal's office.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(e)	<i>Don't let her/him cheat because your parents will be upset when they find out.</i>	Not True 1-----2-----3-----4-----5	Really True _____
(f)	<i>Let her/him cheat because friends are supposed to help each other, especially in difficult situations.</i>	Not True 1-----2-----3-----4-----5	Really True _____

**Now, for the above items, rank each of the items based on how IMPORTANT it would be in helping you to make a decision in this situation. (For example, if an item is the most important put a "1" in the blank space provided on the right-hand side of the page. If it is the second most important item, put a "2" in the blank space provided. If it is the third most important item, put a "3" in the blank space provided and so on.)**

5) Suppose that you hang around with a couple of good friends. You've been friends together for a long time. Since starting the school year, however, you've begun to notice that one of these friends occasionally invites the other friend to do something and doesn't invite you. You feel that he/she is trying to prevent your other friend from talking to you or spending time with you and this makes you feel bad.

What would you do?

			<i>Importance Ranking</i>
(a)	<i>Don't talk to the friend who doesn't invite you any more because he/she is mean.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____
(b)	<i>Talk to the friend who isn't inviting you because it's no fun not being invited.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____
(c)	<i>Invite the other friend to do something, but don't invite the mean person who didn't invite you.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____
(d)	<i>Talk to the friends to let them know that that's not how they're supposed to treat a friend.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____
(e)	<i>Talk to the friend because he/she should know better and that it will hurt your feelings.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____
(f)	<i>Don't mention how you feel because they will think you're overreacting or being too sensitive.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____
(g)	<i>Don't say anything to them because as a friend you're supposed to understand.</i>	Not True 1-----2-----3-----4-----5	Really True 1-----2-----3-----4-----5 _____

Now, for the above items, rank each of the items based on how **IMPORTANT** it would be in helping you to make a decision in this situation. (For example, if an item is the most important put a "1" in the blank space provided on the right-hand side of the page. If it is the second most important item, put a "2" in the blank space provided. If it is the third most important item, put a "3" in the blank space provided and so on.)

## WHAT IS YOUR FAMILY LIKE?

**After each sentence, you will be asked how much you agree or disagree with the sentence. There is a scale that goes from 1 to 5.**

**"1" means that you strongly disagree with the sentence.**

**"2" means that you disagree with the sentence.**

**"3" means that you are in between (unsure) with the sentence.**

**"4" means that you agree with the sentence.**

**"5" means that you strongly agree with the sentence.**

**Circle the number on the scale that is best for you. Be sure to read carefully and answer as honestly as possible.**

- |    |   |                           |                   |
|----|---|---------------------------|-------------------|
| 1. | <i>My parents really expect me to follow family rules.</i>  | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 2. | <i>If I don't behave myself, my parents will punish me.</i>   | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 3. | <i>I can count on my parents to help me out if I have a problem.</i>                                  | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 4. | <i>My parents give me a lot of freedom.</i>   | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 5. | <i>When I do something wrong, my parents do not punish me.</i>  | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 6. | <i>When I have a problem or don't feel well, my parents are willing to help me figure things out.</i> | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 7. | <i>My parents are happy when I do something well.</i>   | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |
| 8. | <i>My parents let me do whatever I want.</i>  | Strongly<br>Disagree      | Strongly<br>Agree |
|    |   | 1-----2-----3-----4-----5 |                   |

9. *My parents praise me when I am successful or have done well.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
10. *My parents believe I have a right to my own point of view.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
11. *My parents and I have fun talking and doing things together.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
12. *My parents do special things for me.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
13. *My parents let me think for myself.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
14. *My parents are happy with me most of the time.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
15. *We don't have many rules at home and the rules we have aren't enforced.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree
16. *My parents encourage me to make decisions for myself carefully.* Strongly Disagree 1-----2-----3-----4-----5 Strongly Agree

## WHAT IS YOUR BEST FRIEND LIKE?

**Instructions:** Put the name of your very best friend here: \_\_\_\_\_

**We want to ask some questions about your best friend so we can know what he or she is like. Below you will see several different pairs of characteristics. For each pair of characteristics, you will be asked which characteristic your best friend is most like. There is a scale that goes from 1 to 5.**

**"1" means that the first characteristic is really true of your best friend.**

**"2" means that the first characteristic is true of your best friend.**

**"3" means that your best friend is in between the first and second characteristics.**

**"4" means that the second characteristic is true of your best friend.**

**"5" means that the second characteristic is really true of your best friend.**

**Circle the number on the scale that is closest to what your best friend is like. Remember, there are no right or wrong ways to answer these questions.**

Forgiving	1-----2-----3-----4-----5	Holds a grudge
Clear thinking	1-----2-----3-----4-----5	Mixed up
Sociable	1-----2-----3-----4-----5	Withdrawn
Generous	1-----2-----3-----4-----5	Stingy
Conscientious	1-----2-----3-----4-----5	Not conscientious
Talkative	1-----2-----3-----4-----5	Not talkative
Goes out of way for others	1-----2-----3-----4-----5	Doesn't go out of way for others
Does things for me	1-----2-----3-----4-----5	Doesn't do things for me
Cheerful	1-----2-----3-----4-----5	Sad
Honest	1-----2-----3-----4-----5	Dishonest
Has lots to offer	1-----2-----3-----4-----5	Doesn't have lots to offer
Entertaining	1-----2-----3-----4-----5	Quiet

## Appendix D

### Composition and Reliabilities for the Moral Orientation Class Play (MOCP)

<b><u>Subscale</u></b>	<b><u>Item No.</u></b>	<b><u>Subscale Item</u></b>
<b><i>Justice</i></b> ( $\alpha=.65$ )	3, Same-sex	- Someone who plays fairly.
	3, Other-sex	- Someone who plays fairly.
	5, Same-sex	- Someone who makes sure that everyone is treated equally.
	5, Other-sex	- Someone who makes sure that everyone is treated equally.
<b><i>Care</i></b> ( $\alpha=.68$ )	4, Same-sex	- Someone who cares about others.
	4, Other-sex	- Someone who cares about others.
	6, Other-sex	- Someone who helps others when they need it.



## **Appendix E**

### **Composition and Reliabilities for the Moral Perspective Questionnaire - IV (MPQ-IV)**

**Items on the Moral Perspective Questionnaire - IV (MPO-IV)**

<b><u>Subscale</u></b>	<b><u>Vignette/ Item No.</u></b>	<b><u>Subscale Item</u></b>
<b><i>Preconventional-antisocial</i></b> ( $\alpha = .78$ )	2(a)	- Dump your old friend because you'll have more fun with the new friends.
	2(c)	- Dump the old friend because the new friends will be mean to you if you don't.
	3(a)	- Take the stuff from the store because it will be fun seeing if you can get away with it.
	3(b)	- Take the stuff from the store because you will really enjoy using it later.
	4(a)	- Let the girl/boy cheat because you will lose a friend if you don't.
	4(b)	- Let her/him cheat because then she/he will let you cheat on some other test.
	<b><i>Preconventional-prosocial</i></b> ( $\alpha = .72$ )	1(a)
1(b) <sup>a</sup>		- Keep hanging around with these people because you really enjoy their company.
1(e)		- Stop seeing them because your parents will be upset or disappointed with you if you don't.
2(b)		- Keep the old friend because she/he is more fun than the new friends.
3(c)		- Don't take the stuff from the store because you could get into trouble with your parents and the police.
3(d)		- Don't take the stuff because the store owner will get really mad at you when he/she finds out.
4(c)		- Don't let her/him cheat because you could get a "zero" on the test if you're caught.
4(d)		- Don't let her/him cheat because the teacher will send you to the principal's office.
4(e)		- Don't let her/him cheat because your parents will be upset when they find out.
5(b)		- Talk to the friend who isn't inviting you because it's no fun not being invited.

***Conventional-antisocial***  
( $\alpha = .61$ )

- 2(f) - Dump the old friend because if you stick with the old friend the new friends will think you're a loser too.
- 2(h) - Dump the old friend because the new friends should be able to spend time just with you.
- 3(e) - Take the things from the store because your friends will think you're a wimp if you don't.
- 3(h) - Take the things from the store because friends are supposed to stick together no matter what they do.
- 4(f) - Let her/him cheat because friends are supposed to help each other, especially in difficult situations.

***Conventional-prosocial*** ( $\alpha = .64$ )

- 1(e) - Stop seeing them because your parents will be upset or disappointed with you if you don't.
- 1(f)<sup>a</sup> - Keep seeing the people because they are your friends and friends should stick by each other and not give up at the first signs of trouble.

Note. <sup>a</sup>These items were reverse-scored to determine the intra-subscale reliability.

## Appendix F

### Composition and Reliabilities for the Parenting Style Inventory - III (PSI-III)

<u>Subscales</u>	<u>Item No.</u>	<u>Subscale Item</u>
<b>Control</b> ( $\alpha=.74$ )	1*	- My parents really expect me to follow family rules.
	2*	- If I don't behave myself, my parents will punish me.
	5	- When I do something wrong, my parents do not punish me.
	8	- My parents let me do whatever I want.
	15	- We don't have many rules at home and the rules we have aren't enforced.
<b>Warmth</b> ( $\alpha=.78$ )	3	- I can count on my parents to help me out if I have a problem.
	6	- When I have a problem or don't feel well, my parents are willing to help me figure things out.
	7	- My parents are happy when I do something well.
	9	- My parents praise me when I am successful or have done well.
	11	- My parents and I have fun talking and doing things together.
	12	- My parents do special things for me.
	14	- My parents are happy with me most of the time.
<b>Autonomy-granting</b> ( $\alpha=.66$ )	4	- My parents give me a lot of freedom.
	10	- My parents believe I have a right to my own point of view.
	13	- My parents let me think for myself.
	16	- My parents encourage me to make decisions for myself carefully.

Note. \*These items were reverse-scored to determine the intra-subscale reliability.