PEER NOMINATION PATTERNS AND SOCIAL IDENTIFICATION IN THE CONTEXT OF CHILDREN'S CLIQUES AND FRIENDSHIP GROUPS IN MIDDLE CHILDHOOD

by

KYONGBOON KWON

(Under the Direction of A. Michele Lease)

ABSTRACT

The overarching goal of the dissertation research was to examine the impact of the peer group context on children's peer-related perceptions and behaviors. The first study examined the impact of children's clique membership on peer nomination patterns. Children were found to nominate their cliquemates more often for positive characteristics and high social status indicators than for negative characteristics and low social status indicators. Gender and grade level effects were also examined. The study results implicate the social network as an important factor to consider for understanding the source of children's social reputation and status. The second study examined the social identification process as a possible mechanism explaining peer group influence in the domains of *academic* behavior, adherence to *trends*, and *misbehavior*. Overall, children (1) reported greater intent to change their behaviors and conform to friendship group norms and (2) perceived greater similarity between themselves and their friendship group members, when they strongly identified with their friendship group. The dissertation concludes with a summary of findings and suggestions for future directions.

INDEX WORDS: Clique, Nomination Patterns, Social Identity, Friendship Group Norms, Conformity, Perceived Similarity

PEER NOMINATION PATTERNS AND SOCIAL IDENTIFICATION IN THE CONTEXT OF CHILDREN'S CLIQUES AND FRIENDSHIP GROUPS IN MIDDLE CHILDHOOD

by

KYONGBOON KWON

B.Ed., Seoul National University of Education, Seoul, Korea 1995
 M.A., University of Minnesota 2003
 M.A., University of Georgia 2006

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSPHY

ATHENS, GEORGIA

2008

© 2008

Kyongboon Kwon

All Rights Reserved

PEER NOMINATION PATTERNS AND SOCIAL IDENTIFICATION IN THE CONTEXT OF CHILDREN'S CLIQUES AND FRIENDSHIP GROUPS IN MIDDLE CHILDHOOD

by

KYONGBOON KWON

Major Professor: A. Michele Lease

Committee: Jonathan Campbell

Allan Cohen Roy P. Martin

Electronic Version Approved:

Maureen Grasso Dean of the Graduate School The University of Georgia August 2008

ACKNOWLEDGEMENTS

I would like to take this opportunity to express my gratitude and respect to numerous individuals who inspired me to complete my dissertation research and doctoral degree. First of all, I thank Dr. Michele Lease for her exceptional mentorship with dedication, insights, and enthusiasm. I thank my committee members, Drs. Jonathan Campbell, Allan Cohen, and Roy Martin, for their constructive feedback in the process of designing and refining the work. I also thank Dr. Joseph Wisenbaker who generously provided help to write SAS programs for complicated analyses. My gratitude is extended to the research team, including Mary Lutz and Lindsay Masland, for their ideas and time in the process of questionnaire development and data collection. I also thank students and teachers who participated in the research project. Finally, I would like to thank my parents for their tremendous support and faith in me. Funding for the dissertation research was partly provided by a Graduate Dean's Award and the Owen Scott Graduate Fellowship.

TABLE OF CONTENTS

			Page
ACKN	1OM	VLEDGEMENTS	iv
LIST (OF 7	TABLES	vii
LIST (OF I	FIGURES	viii
СНАР	TEI	R	
	1	DISSERTATION INTRODUCTION	1
		The Significance of Peer Groups in Child Development	2
		Theoretical Perspectives on Peer Influence	2
		Different Types of Peer Groups	4
		Overview of Two Studies	5
		References	7
	2	THE IMPACT OF CLIQUE MEMBERSHIP ON CHILDREN'S PEER	
		NOMINATION PATTERNS	10
		Introduction	12
		Method	20
		Results	23
		Discussion	28
		References	34
	3	CHILDREN'S SOCIAL IDENTIFICATION WITH A FRIENDSHIP GROUP:	A
		MODERATING EFFECT ON CONFORMITY TO FRIENDSHIP GROUP	
		NORMS AND DERCEIVED SIMILARITY	11

	Introduction	46
	Method	55
	Results	60
	Discussion	67
	References	74
4	DISSERTATION CONCLUSION	88
	Summary of Findings	89
	Future Directions	91
	References	92

LIST OF TABLES

Page
Table 1-1: Univariate Tests, Means, and Standard Deviations for Social and Behavioral
Characteristics by Gender and Grade
Table 1-2: Univariate Tests, Means, and Standard Deviations for Social Status Indicators by
Gender and Grade 41
Table 2-1: Intercorrelations between Study Variables, Means, and Standard Deviations80
Table 2-1: Hierarchical Multiple Regression, with Gender, Friendship Group Norms, and Social
Identification as Predictors of Children's Intent to Conform to Friendship Group Norms
81
Table 2-3: Hierarchical Multiple Regression with Gender, Self-perceived Functioning, and
Social Identification as Predictors of Friendship Group Norms

LIST OF FIGURES

Page
Figure 1-1: Means and standard deviations (in parentheses) of proportion of cliquemate
nominations for social and behavioral characteristics
Figure 1-2: Means and standard deviations (in parentheses) of proportion of cliquemate
nominations for social status indicators
Figure 2-1: Moderating effect of social identification on perceived friendship group trend norms
and children's intent to conform to the norms
Figure 2-2: Moderating effect of social identification on perceived friendship group misbehavior
norms and children's intent to conform the norms
Figure 2-3: Moderating effect of social identification on children's own sense of academic
functioning and friendship group academic norms85
Figure 2-4: Moderating effect of social identification on children's own sense of following latest
trend and friendship group trend norms
Figure 2-5: Moderating effect of social identification on children's own sense of misbehavior
and friendship group misbehavior norms87

CHAPTER 1

DISSERTATION INTRODUCTION

The Significance of Peer Groups in Child Development

The significant impact of social group membership on individuals' perceptions, attitudes, and behaviors has been widely supported by social psychologists as well as developmental psychologists (Bronfenbrenner, 1979; Hartup, 1983). Children's selective peer affiliation is observed as early as preschool (Strayer & Santos, 1996); however, children's involvement in rather exclusive social clusters appears to become more prevalent as they enter middle childhood (Crockett, Losoff & Petersen, 1984). Specifically, cliques are well-defined networks of children who are friends with each other and share similar characteristics in terms of gender, race, or social and behavioral characteristics (Gifford-Smith & Brownell, 2003; Hallinan, 1980). In addition to interaction-based peer groups, adolescents are shown to be involved in reputation-based groups called "crowds" (Brown, 1990). Although the definition of "social group" can vary widely, depending on the researcher's purpose and interests, the social grouping of interest in the current two studies was small groups of children bounded by associations and friendships.

Evidence suggests that involvement in different types of peer groups affects many aspects of social and academic functioning of children and adolescents, including self-esteem (Brown & Lohr, 1987), aggression (Cairns, Cairns, Neckerman, Gest & Gariépy, 1988), delinquency (Ennett & Bauman, 1994; Haynie, 2001), and academic motivation and achievement (Kindermann, 2007; Ryan, 2001). Despite such broad evidence, relatively little is known about how peer groups exert their influence on the children in the peer group.

Theoretical Perspectives on Peer Influence

In order to understand children's peer group influence, the logical next step is to conduct targeted studies designed to shed light on possible explanatory mechanisms. In other words, what is the process by which children are influenced by their peer group?

Selection and socialization are arguably the most widely studied peer group influence processes. Specifically, selection refers to the tendency for children to choose to affiliate with peers who are similar to them on numerous characteristics; socialization refers to the tendency for children to become even more similar to their friends and peer group members over time, even controlling for the initial effect of selection (see review by Gifford-Smith & Brownell, 2003). Many researchers who examine peer group influence have employed Bandura's (1977) social learning theory to explain the way in which children are socialized by their peers. That is, peers provide behavioral models for other children to imitate and follow. Those behaviors become strengthened as peers reinforce model-consistent behaviors and reject/punish non-normative behaviors. In general, social learning processes appear to be stronger for children who are younger and involved in intimate relationships with their friends and/or peer group members (Kobus, 2003).

Although Social Identity Theory has received little attention from those who study peer influence, it might be a useful adjunct or alternative to social learning theory for explaining the process of peer influence. Specifically, Social Identity Theory has long been employed to account for various group-related phenomena, including intergroup relations as well as intragroup processes (see Tajfel & Turner, 1986). Tajfel (1978) defines social identity as "that part of an individual's self-concept which derives from his or her knowledge of his or her membership in a social group (groups) together with the value and emotional significance attached to that membership" (p. 63). The theory holds that when individuals perceive themselves as a member of a group, the group membership becomes a part of their self-definition. Further, as individuals more strongly identify with the group, they are more likely to adopt the beliefs and behaviors that are accepted and valued by the group (Terry & Hogg, 1996).

Conversely, people appear to be less likely to adopt that group's practices if they do not closely identify with the group. Similar processes might apply to children's peer groups. That is, children might become more susceptible to peer group influence when they strongly identify with their peer group as characterized by a sense of connectedness, positively felt emotions for the group, and perceived importance of membership in the group.

Different Types of Peer Groups

A general consensus does not exist regarding the definition, measurement, or analysis of the peer group which is developmentally significant to children (Cairns, Xie & Leung, 1998).

Depending on the phenomenon of interest, researchers have employed various methods and analytic procedures to identify differing types of peer groups. One of the conceptual distinctions between the differing methods lies in the source of informants. Some researchers have relied on children's self-report of their friendships (e.g., Ennett & Bauman, 1994; Urberg, Değirmencioğlu, Tolson & Halliday-Scher, 1995), whereas others have used multiple peer informants to assess children's peer affiliation patterns by asking children to name the groups of children "who hang around together a lot" (e.g., Cairns, Perrin & Cairns, 1985).

Unique advantages are attached to each method of peer group identification. The multiple-informant method assumes that peer affiliation patterns within a particular context (e.g., classroom) are publicly known and perceived similarly by individuals within that context (Kindermann, 1998). Also, the multiple-informant method is not as subject to biases associated with the self-report method, which can result in an over-report of socially desirable peer affiliations and an under-report of socially undesirable peer affiliations (Leung, 1996). However, research also suggests that the reference group for peer-influenced behavior might be subjective. For example, Kiesner and colleagues (2002) have demonstrated that the self-reported peer group

(i.e., a peer group to which an individual claims membership) serves as an important source of peer influence among adolescents. Kiesner and colleagues reasoned that adolescents might follow their peer group members in order to secure approval and acceptance from them.

Overview of Two Studies

This dissertation research is comprised of two studies. The study of peer context in middle childhood is the overarching theme that ties the two studies together. Specifically, the broad goal of these two studies was to investigate the effect of children's peer group (i.e., clique, friendship group) membership on their peer-related perceptions and social behaviors.

The first study examined the impact of children's clique membership on their peer nomination patterns. Peer nomination methodology assumes that each child in the class had an equal chance of being nominated for various social and behavioral characteristics. However, children's peer nominations might be systematically affected by social relationships such as peer group involvement. The peer group of interest in this study was cliques which are characterized by frequent peer affiliations. Specifically, cliques were identified with the Social Cognitive Map procedure (Cairns et al., 1985) in which children report groups of peers who "hang around together a lot" at school. Children's peer nomination patterns were examined in terms of the proportion of cliquemates children nominated for various social and behavioral characteristics (e.g., prosocial, influence, being cool, overt aggression, relational aggression, and bullying) and social status indicators (like-most, like-least, most-popular, and least-popular). We hypothesized that the proportion of cliquemate nominations would be higher for positive characteristics (e.g., prosocial, cool) and high social status indicators (e.g., like-most, most-popular) than for negative characteristics (e.g., aggression, bullying) and for low social status indicators (like-least, leastpopular). Next, gender effects on the proportion of cliquemate nominations were examined.

Specifically, girls were expected to nominate their cliquemates more frequently for *relational aggression* and *prosocial* than were boys (Björkqvist, Lagerspetz & Kaukiainen, 1992; Crick & Grotpeter, 1995), whereas the opposite pattern was expected for overt/physical types of aggression. Finally, we examined whether positive perceptual biases toward cliquemates would be greater for younger children as compared to older children. It was hypothesized that children's cliquemate nominations for positive characteristics and high social status indicators would be greater for lower grade children (i.e., 3rd grade) than for upper grade (i.e., 5th grade) children.

The second study examined social identification as a possible mechanism by which children are influenced by their peer group. The theoretical framework of the second study was Social Identity Theory (Tajfel, 1978). According to the theory, social identity is part of an individual's self-concept specifically related to his or her social group membership. Given that social identity is subjective in nature, children's self-reported friendship group to which they perceive themselves to belong was considered. The social identification process suggests that the degree of peer group influence might depend on the extent to which children identify themselves with their peer group (Terry & Hogg, 1996). That is, children are more likely to be influenced by their peer group members when they strongly identify with the group, as opposed to when they do not. Social identification was defined as being comprised of three related, but distinct, dimensions based on theoretical and empirical grounds (Tajfel, 1978; Cameron, 2004): in-group ties (sense of connectedness), in-group affect (positive emotions), and centrality (salience and importance of friendship group membership). The study examined three factors that might contribute to a child's degree of social identification with their friendship group: gender, perceived popularity, and reciprocation of friendship group nominations. Further, the study tested the role of social

identification in moderating (a) the relationship between friendship group norms and children's intent to change their behaviors and conform to the norms and (b) the relationship between children's own sense of functioning in various behaviors and perceived friendship group norms in the corresponding domain (i.e., perceived similarity between children and their friendship group members).

Finally, the dissertation is concluded with a summary of the findings of the two studies. Also, directions for future research are discussed.

References

- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.
- Björkqvist, K., Lagerspetz, K. M. & Kaukiainen, A. (1992). Do girls manipulate and boys fight?

 Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*,

 18(2), 117-127.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, Mass.: Harvard University Press.
- Brown, B. B. (1990). Peer groups and peer cultures. In Feldman, S. S., Elliott, G. R. (Eds.). *At the threshold: The developing adolescent.* (171-196). Cambridge, MA, US: Harvard University Press.
- Brown, B. B. & Lohr, M. J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. *Journal of Personality & Social Psychology*, *52*(1), 47-55.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S. D. & Gariépy, J. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology*, 24(6), 815-823.

- Cairns, R. B., Perrin, J. E. & Cairns, B. D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence*, *5*(3), 339-355.
- Cairns, R., Xie, H. & Leung, M.-C. (1998). The popularity of friendship and the neglect of social networks: Toward a new balance. In W. M. Bukowski & A. H. Cillessen (Eds.), Sociometry then and now: Building on six decades of measuring children's experiences with the peer group. (pp. 25-53): Jossey-Bass.
- Cameron, J. E. (2004). A three-factor model of social identity. Self and Identity, 3, 239-262.
- Crick, N. R. & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66(3), 710-722.
- Crockett, L., Losoff, M. & Petersen, A. C. (1984). Perceptions of the peer group and friendship in early adolescence. *Journal of Early Adolescence*, *4*(2), 155-181.
- Ennett, S. T. & Bauman, K. E. (1994). The contribution of influence and selection to adolescent peer group homogeneity: The case of adolescent cigarette smoking. *Journal of Personality and Social Psychology*, 67(4), 653-663.
- Gifford-Smith, M. E. & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, *41*(4), 235-284.
- Hallinan, M. T. (1980). Patterns of cliquing among youth. In H. C. Foot & A. J. Chapman (Eds.), Friendship and social relations in children. (pp. 321-342): Transaction Publishers.
- Hartup, W. W. (1983). Peer groups. In Mussen, P. H. (ed.), *Handbook of Child Psychology:*Socialization, Personality and Social Development, Vol. 4 (4th ed.). New York: Wiley.
- Haynie, D. L. (2001). Delinquent peer revisited: Does network structure matter? *American Journal of Sociology*, 106(4), 1013-1057.

- Kiesner, J., Cadinu, M., Poulin, F. & Bucci, M. (2002). Group identification in early adolescence: Its relation with peer adjustment and its moderator effect on peer influence. *Child Development*, 73(1), 196-208.
- Kindermann, T. A. (1998). Children's development within peer groups: Using composite social maps to identify peer networks and to study their influences. In W. M. Bukowski & A. H. Cillessen (Eds.), Sociometry then and now: Building on six decades of measuring children's experiences with the peer group. (pp. 55-82): Jossey-Bass.
- Kindermann, T. A. (2007). Effects of naturally existing peer groups on changes in academic engagement in a cohort of sixth graders. *Child Development*, 78(4), 1186-1203.
- Kobus, K. (2003). Peers and adolescent smoking. Addiction, 94, 37-55.
- Leung, M-C. (1996). Social networks and self enhancement in Chinese children: A comparison of self reports and peer reports of group membership, *Social Development*, *5*(2), 146-157.
- Ryan, A. M. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development*, 72(4), 1135-1150.
- Strayer, F. F. & Santos, A. J. (1996). Affiliative structures in preschool peer groups. *Social Development*, *5*, 117-130.
- Tajfel, H. (1978). Differentiation between social groups. London: Academic Press.
- Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S.Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations*. Chicago: Nelson Hall.
- Terry, D. J. & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22(8), 776-793.

CHAPTER 2

THE IMPACT OF CLIQUE MEMBERSHIP ON CHILDREN'S PEER NOMINATION ${\bf PATTERNS}^1$

¹ Kwon, K. and Lease, A. M. To be submitted to Social Development

Abstract

The effect of children's clique membership on their nominations of peers for various behavioral and social descriptors as well as social status indicators was examined in a sample of 455 children in 3rd through 5th grade. The cliques within each grade level were identified using the social cognitive map procedure. The proportion of cliquemates nominated was higher for positive characteristics (e.g., prosocial, cool) and high social status indicators (like-most, most-popular) than for negative characteristics (e.g., aggression, bully) and low social status indicators (like-least, least-popular). After controlling for the effect of clique size on the proportion of cliquemate nominations, gender and grade effects were found. Male children nominated more cliquemates for cool, overt aggression, and bully than did female children, whereas the opposite pattern was found for relational aggression. Also, fourth graders nominated more cliquemates for prosocial, cool, like-most, and most-popular than did fifth graders. Third graders nominated more cliquemates for most-popular than did fifth graders. The results suggest the need to consider social network patterns when assessing children's social reputations and social status.

Key words: clique, nomination patterns, interpersonal perceptions

Introduction

Since the development of the sociometric method by Moreno in the 1930's, peers have been regarded as valuable sources of information regarding children's behavioral and social functioning (Schneider, 2000). Specifically, the peer nomination procedure (e.g., Masten, Morison & Pellegrini, 1985), in which children nominate peers for various traits, such as sociability, aggression, social withdrawal, and social status (i.e., likeability, popularity) has been widely used to gather descriptive information about children's social reputation and status. Whereas the peer nomination procedure involves both nominators and nominees, the typical use of this method focuses on nominees, or how a child is perceived by his or her peers. According to this procedure, the total number of nominations a child receives from peers is used as an indicator of the child's social and behavioral reputation (Masten et al., 1985) and social status (Coie, Dodge & Coppotelli, 1982). Numerous studies have shown that children's behavioral reputations and the degree to which children are accepted by their peer group are significantly related to their social and emotional adjustment, including long-term adjustment outcomes (e.g., Deater-Deckard, 2001; Morison & Masten, 1991).

Research has demonstrated that children are able to provide reliable and valid information on functioning of their peers. Specifically, evidence suggests that there exists considerable agreement in children's peer perceptions. For example, children have been found to show high consensus regarding which of their peers are victimized in their classrooms (Perry, Kusel & Perry, 1988). Research further suggests that children not only agree with each other but also with teachers and objective measures in terms of peer perceptions. In one of the most comprehensive studies of its type, a previous study by Malloy, Yarlas, Montvilo, and Sugarman (1996) examined interpersonal perceptions of children in grades one through six regarding various

social, physical, emotional, and cognitive characteristics. They found that peers and teachers showed a high level of agreement in their judgments of a target child's various characteristics. They also found that children's peer ratings of reading and math abilities were substantially correlated with objective measures of those abilities.

Despite the evidence that children share similar perceptions toward their peers, there are likely individual differences in children's peer perceptions as revealed by peer nomination patterns. For example, some children might nominate a certain peer as aggressive, whereas others do not. What might explain individual differences in children's peer perceptions? According to the sociocultural perspective of human development (Vygotsky, 1978), an individual's interpersonal perceptions are affected by the social context in which he or she is embedded. In this study, we examined children's cliques as a social context that might contribute to children's peer perceptions with regard to various behavioral characteristics and social status indicators. Cliques are subgroups of children who selectively affiliate with one another (Cairns, Leung & Cairns, 1995; Hallinan, 1980). Research suggests that children's involvement in cliques becomes increasingly prevalent as they begin middle childhood, and cliques serve as an important social context where children maintain the majority of their peer interactions (Crockett, Losoff & Petersen, 1984). Also, numerous studies have shown that involvement in a clique affects an individual's social, academic, and behavioral functioning (Cairns, Cairns, Neckerman, Gest & Gariépy, 1988; Ennett & Bauman, 1994; Haynie, 2001; Kindermann, 1993; Kwon & Lease, 2007; Ryan, 2001). However, little is known regarding the degree to which children's clique membership contributes to their perceptions of peers, as revealed through peer nomination patterns.

Nominator Effects in Children's Peer Nominations

Thus far, only a few studies have examined the effect of nominator characteristics on children's peer nomination patterns. For example, Card, Hodges, Little, and Hawley (2005) examined the role of gender in sixth-grade students' perceptions of different types of aggression (e.g., overt, relational, instrumental, and reactive) and social status (e.g., victimization, peer influence, perceived popularity, and social preference). They examined nominator effects using the social relations model (Kenny, 1994), which partitions variability in interpersonal perceptions into partner effects (i.e., the manner in which a child is viewed by perceivers), actor effects (i.e., the manner in which perceivers view the target), and relationship effects (i.e., unique relationship between the views they have of each other). The results of that study demonstrated significant actor effects as well as significant partner effects. In other words, children demonstrated similar perceptions of a particular peer, but they also demonstrated some differences regarding whom they viewed to be aggressive, popular, and likable in their classroom. Specifically, the gender of the perceiver was found to be an important explanatory factor for the variability in peer nominations: Children tended to nominate same-gender peers more often than cross-gender peers for the majority of study variables, including relational aggression, reactive aggression, and all indicators of social status. The results appear to be partly explained by Maccoby's (1998) findings that children's peer relations are gender-segregated. In other words, because children tend to affiliate with same-gender peers, they might have more interest in and knowledge of same-gender peers. This, in turn, might lead children to make more same-gender than cross-gender nominations across various social and behavioral characteristics.

In another study, Rodkin, Farmer, Pearl, and Van Acker (2006) examined *from whom* highstatus children receive reputational support, in contrast with many studies that have focused on the characteristics of children who receive high-status nominations. Specifically, the authors used the item 'who's cool' as an indicator of high status. Being cool has been found to be related to popularity as well as aggression (Lease, Kennedy & Axelrod, 2002; Rodkin, Farmer, Pearl & Van Acker, 2000). The results of the study indicated that over 60% of cool nominations were given to children's own clique members. Also, the pattern of cool nominations was found to be closely related to the overall level of aggression of the group to which the nominator belonged. Specifically, popular-aggressive (Tough) children were perceived as cool by peers in aggressive groups, whereas popular-nonaggressive (Model) children were perceived as cool by peers in nonaggressive groups. Interestingly, when the nominator's characteristics did not correspond to characteristics of the group to which he or she belonged (e.g., an aggressive child belonged to a non-aggressive group), children's cool nomination patterns corresponded to group characteristics, not to the nominator's characteristics. The results of Rodkin et al. have provided evidence that the peer group to which a child belongs significantly affects his or her perceptions toward peers.

The Effect of Clique Membership on Children's Peer Nominations

Cliques consist of children who are friends with one another within a fairly exclusive boundary (Crockett et al., 1984; Hallinan, 1980). As an individual's interpersonal relationships affect his or her perceptions toward others, it was conceived that children's clique membership might also affect their peer perceptions. The literature on children's friendships appears to provide useful insights on children's perceptions toward cliquemates. A meta-analytic review by Newcomb and Bagwell (1995) revealed that children engage in more positive social interactions (e.g., cooperation, talking, positive affect) with their friends than with their non-friends. The positive social interactions among friends likely lead children to perceive their friends favorably.

Similarly, children might perceive their cliquemates positively to the extent that their interactions with cliquemates are positive. Children's positive interactions with and emotional bonding to their cliquemates, in turn, might lead children to nominate their fellow clique members more often for positive behavioral characteristics (e.g., prosocial) and high social status indicators (e.g., like-most, most-popular) than for negative behavioral characteristics (e.g., aggression) and low social status indicators (e.g., like-least, least-popular), regardless of the general perceptions of the larger peer group toward their cliquemates. Another factor that appears to play a role in children's cliquemate nominations is the size of the clique to which a child belongs. For example, particularly among males, children have been found to be more liked by and more popular among peers when they belong to a larger peer cluster than to a smaller peer cluster (Benenson, 1990; Ladd, 1983). This positive association between the cluster size and a child's social status is likely due to the tendency for children to nominate their own cliquemates as well-liked and/or popular.

The manner in which children's clique membership affects their peer nomination patterns can also be explained by Social Identity Theory (SIT; Tajfel, 1978) to some extent. Specifically, SIT suggests that individuals tend to show favoritism toward their in-group members when they identify themselves as a member of a group. One of the fundamental assumptions underlying SIT is that individuals are internally motivated to enhance their self-esteem by evaluating their own groups to be superior to others (Hogg & Abrams, 1990). Several developmental studies of intergroup attitudes have supported in-group favoritism among preschool and elementary school children. For example, in experimental settings in which study participants were randomly assigned to experimentally contrived groups (e.g., 'blue' versus 'yellow' groups), children displayed positive biases toward their own group members (Bigler, Jones & Lobliner, 1997; Yee

& Brown, 1992). In the context of naturally-occurring peer groups, such as cliques, similar perceptual biases are expected in that children likely display favorable perceptions toward their own clique members.

However, evidence suggests that children's relationships with and perceptions toward their cliquemates might not always be positive. For example, research on children's friendship has shown that children are involved in aversive interactions with their friends, such as conflict, jealousy, and betrayal (Bukowski, Newcomb & Hartup 1996). Grotpeter and Crick (1996) also found that children use relational aggression toward their friends with whom they report to engage in highly intimate and exclusive relationships. In the context of children's peer groups, Salmivalli, Huttunen, and Lagerspetz (1997) found that, particularly among girls, bullies and victims belonged to the same social clusters. Salmivalli and colleagues explained that it might be more important for girls to belong to a peer group than to remain isolated. This might lead victims to stay in a peer group, even with peers who bully them. Based on these findings, we expected children to nominate their cliquemates for unfavorable social and behavioral characteristics and low social status indicators to the extent that children are involved in negative interactions with their cliquemates.

Overall, the literature suggests that children's clique membership likely affects their experiences and perceptions of peers such that children could conceivably nominate their cliquemates for both positive and negative characteristics. However, we hypothesized that children, in general, would nominate their cliquemates more often for positive characteristics than for negative characteristics.

Current Study

The purpose of the study was to investigate the effect of clique membership on children's peer nomination patterns. Cliques were measured according to the Social Cognitive Map (SCM) procedure in which children report on peer affiliation patterns of self and others -- "who hangs around together a lot at school?" (Cairns, Perrin & Cairns, 1985). Research has supported that children's social clusters and networks, including cliques, affect many aspects of their social behaviors. However, our knowledge is limited regarding the contribution of children's clique memberships to their peer nomination practices. Also, Rodkin and colleagues (2006) argued that "when group identification is absent from sociometric assessment, or when groups are simply the sum or average of all children in a peer ecology, only a single voice comes through (p. 197)." Although one might speculate logically that children likely nominate their cliquemates more often for positive characteristics than for negative characteristics, the results of this study will add to the literature by providing empirical evidence regarding the extent to which children's clique membership contributes to their peer nomination patterns.

There were three specific study goals. First, we examined children's peer nomination patterns in terms of the proportion of cliquemates nominated for various behavioral and social characteristics and social status variables. Behavioral and social characteristics of interest included: *prosocial, influence, being cool, overt aggression, relational aggression,* and *bullying*. The proportion of cliquemates nominated for a specific characteristic was calculated for each child by dividing the number of his or her cliquemates nominated for the characteristic by the total number of nominations he or she made for the characteristic. We hypothesized that the proportion of cliquemate nominations would be higher for positive reputational items (e.g., *prosocial, cool*) than for negative reputational items (e.g., *aggression, bullying*). Four types of

social status variables were examined: *like-most*, *like-least*, *most-popular*, and *least-popular*. We hypothesized that the proportion of cliquemates for social status nominations would be higher for *like-most* and *most-popular* than for *like-least* and *least-popular*.

Second, we examined the effect of gender in children's cliquemate nominations. The effect of gender was particularly of interest with regard to aggression and prosocial nominations. Studies have demonstrated that physical or overt aggression is more frequently used among boys, whereas relational aggression is more prevalent among girls (e.g., Björkqvist, Lagerspetz & Kaukiainen, 1992; Crick & Grotpeter, 1995). Therefore, girls were expected to nominate their cliquemates more frequently for relational aggression than were boys, whereas the opposite patterns were expected for overt/physical types of aggression. Also, given that females tend to be more relationship-oriented than are males (Berndt, 1982), it was expected that girls would nominate their cliquemates more frequently for prosocial characteristics than would boys.

Third, we examined the effect of grade level on children's cliquemate nominations. In a cross-sectional study of children's interpersonal perceptions toward classmates, Malloy, Sugarman, Montvilo, and Ben-Zeev (1995) found that, with an increase in age, the magnitude of target (nominee) effects increased, whereas the magnitude of perceiver (nominator) effects decreased. In other words, young children tend to be idiosyncratic and subjective in terms of their peer perceptions; however, with development, children tend to display increasing agreement with one another regarding peers' social and behavioral characteristics. Similar patterns of changes in peer perceptions were expected in the context of children's cliques. That is, younger children might display greater levels of positive perceptual bias toward their cliquemates than do older children, which likely leads to a higher rate of nominations of their cliquemates for positive characteristics than expected by chance alone. Conversely, as children

grow older, they might increasingly perceive their cliquemates more 'objectively' and, thus, display a less biased view toward their own cliquemates. Overall, it was hypothesized that children's cliquemate nominations for positive characteristics and indicators of high social status (i.e., like-most, most-popular) would be greater for lower grade children (i.e., 3rd grade) than for upper grade (i.e., 5th grade) children.

Method

Participants

The participants were 455 (237 girls, 218 boys) students from four rural elementary schools in the southeastern region of the United States. Students were enrolled in third (N=102), fourth (N=154), and fifth (N=199) grades. Overall, the sample was, according to school records, 77% White, 13% Black, and 9% other ethnicities.

Procedure

Both active parental consent and child assent were required for participation in this study. School personnel indicated that students in the participating schools had considerable cross-classroom interactions with those in the same grade. Thus, all measures that involve peer nominations were grade-based, instead of classroom-based. Similarly, consent rate was calculated for each grade level unit (e.g., all 4th grade children at School 1). Parental consent and child assent were obtained for 81% of possible participants, and the grade level unit participation rate ranged from 75% to 86%. A minimum of 75% participation rate was required for any grade level unit to participate in this study. As part of a larger study on children's peer relations, the questionnaires used in this study were group administered in two one-hour sessions. Instructions for each measure were read aloud in the classroom by one of the researchers, and a second research team member circulated in the classroom to provide individual assistance.

Confidentiality was discussed with participants before the administration of the survey, and they were provided with an index card to cover their answers. Following the university's Institutional Review Board (IRB) guidelines, we included only the names of students whose parents gave consent on the peer nomination rosters. Across all peer nomination measures, children could only nominate participating peers in the grade level unit, and they were not allowed to nominate non-participants on any of the measures. During data collection, nonparticipating students were asked to read or draw quietly at their desks.

Measures

Social cognitive maps (SCM). In order to identify children's discrete cliques, the SCM procedure was used (Cairns et al., 1985). Specifically, with a paper-and-pencil method, children were prompted to think about "the groups of kids who play, work, or hang out together a lot in your grade." As explained in the Procedure section, the nomination roster included all participating children in the grade; the number of grade-level participants ranged from 37 to 63. Children were allowed time to review the roster for participating peers, and they were asked to write the number identifier linked with a nominated participant, rather than the child's name. Children were asked to list as many groups as they could think of, and they were also told that they could report peer groups of any size, including groups of two. Also, children were allowed to list peers as belonging to more than one group. A previous study has established good testretest reliabilities for the SCM procedure, ranging from .74 to .84 (Cairns, Leung, Buchanan & Cairns, 1995). Validity studies on SCM have revealed that children tend to interact more frequently with their own group members than with non-group members (Cairns et al., 1985; Gest, Farmer, Cairns & Xie, 2003), and participants have demonstrated high consensus (up to 96%) regarding peers' clique membership (Cairns et al., 1985).

Social and behavioral characteristics. We followed the Revised Class Play procedure, in which children nominate their peers who suit various roles in an imaginary play (Masten et al., 1985). Specifically, as part of a larger study, children were asked to nominate participating peers who fit various behavioral and social characteristics. Six variables were considered for the purpose of the current study: prosocial (This person is friendly and kind to others and shares with others), *influence* (This person has a lot of influence or a big effect on how other kids act), being cool (This person is really cool), overt aggression (This person says mean things to people or hits and shoves others), relational aggression (This person spreads rumors about others and tells friends not to play with them), and bully (This person bullies others). Following the procedure used by Card and colleagues (2005), children were provided with 10 spaces for each social and behavioral characteristic. Children were allowed to nominate same- and cross-gender peers, and they were also allowed to nominate a person for more than one role. In general, children nominated between 2 and 4 peers across items. The means (M) and standard deviations (SD) of the number of nominations children made for each item are as follows: (1) prosocial (M=3.99, SD=2.64), (2) influence (M=2.37, SD=2.30), (3) cool (M=2.74, SD=2.20), (4) overt aggression (M=3.71, SD=2.68), (5) relational aggression (M=2.60, SD=2.38), (6) bully (M=2.74, SD=2.22).

Social status. Two aspects of social status (i.e., sociometric popularity, perceived popularity) were assessed with four items. Consistent with the nominations for social and behavioral characteristics, children were provided with 10 spaces for each social status item. Sociometric popularity was assessed with *like-most* and *like-least* nominations (Coie et al., 1982), whereby participants were asked to nominate peers they "like to play with the most" and "like to play with the least." The means and standard deviations of the number of nominations children made were:

like-most (M=3.76, SD=2.26) and *like-least* (M=3.45, SD=2.63). Second, perceived popularity was assessed by asking children to nominate peers who are "the *most popular* at school" and who are "the *least popular* at school" (Parkhurst & Hopmeyer, 1998). The means and standard deviations of the number of nominations children made were: *most popular* (M=4.03, SD=2.80) and *least popular* (M=3.66, SD=2.71).

Results

We first report descriptive characteristics of children's cliques identified by the SCM procedure. Second, we examine whether the proportion of cliquemate nominations systematically differs across social and behavioral characteristics and social status indicators. We were specifically interested in whether the proportion of cliquemate nominations would be higher for positive attributes than for negative attributes. Finally, we examine the effect of gender and grade on the proportion of cliquemate nominations for the study variables.

<u>Description of Cliques</u>

Participants' report on peer affiliation patterns in their grade was analyzed with the SCM 4.0 computer program (1998, Center for Developmental Science of the University of North Carolina at Chapel Hill). The output of the SCM program produced 62 discrete cliques with 422 children. The average clique size was 8.8, ranging from 2 to 17; 74% of the total 62 cliques had between 3 and 10 members. A total of 59 cliques (95%) consisted of three or more members, and 3 cliques consisted of two members. The majority of cliques were homogeneous in gender: Out of the total of 62 cliques, 27 consisted of males and 28 consisted of females. Seven cliques were heterogeneous in gender; however, five of those seven included only one opposite-sex member. Clique size did not differ significantly by gender, [t (320) =-1.25, p=.21]: The average clique size for male cliques was 8.5, and that for female cliques was 9. Whereas the majority of children had

a single clique membership, 26 (5.7%) children belonged to more than one clique. There were 7 children (1.5%) who were not identified to belong to any clique. Children who had multiple clique memberships or who did not belong to any clique were not assigned a clique identification number; thus, they were not included in the following analyses, which reduced the sample size from 455 to 422.

Proportion of Cliquemates Nominations for Social and Behavioral Characteristics

In this section, we compared the proportion of cliquemate nominations for the six social and behavioral characteristics. Specifically, it was hypothesized that the proportion of cliquemate nominations would be higher for positively valenced social and behavioral characterisities (e.g., prosocial, cool) than for negatively valenced characteristics (e.g., overt aggression, relational aggression, bully). For each item, the number of a child's cliquemates was counted from the total nominations he or she made for that item. The proportion of cliquemates nominated for each item was determined by the number of cliquemates nominated for the item divided by the total number of nominations. For example, if a child nominated 6 peers for an item, and 3 of them were his or her cliquemates, the proportion of cliquemate nominations for that item is 3/6=.5. The means and standard deviations of the proportion of cliquemates nominated for the six social and behavioral characteristics are depicted in Figure 1. In order to test whether the proportion of cliquemate nominations differs across social and behavioral characteristics, repeated measures one-way analysis of variance was conducted. A repeated measures analysis was chosen because it is considered to be an extended version of the related-sample t-test. That is, the proportion of cliquemate nominations is related in that the participants were measured repeatedly for different study variables.

The sphericity assumption was first tested which requires equal variances of difference scores between levels of repeated measures. Results indicated that the sphericity assumption was violated: The Mauchly's test of sphericity was statistically significant [$\chi^2(14)=200.54$, p<.001]. Thus, the Huynh-Feldt ($\varepsilon = .84$) corrected test was used instead. The Huynh-Feldt adjusted within-subject test was statistically significant [F(4, 1227)=70.95, p<.001], suggesting that the proportion of cliquemate nominations differs across the social and behavioral characteristics. A Bonferonni multiple comparison procedure was used to examine the pairwise contrasts among cliquemate proportion scores. The difference between all pairs of cliquemate proportion scores was statistically significant at the .05 significance level with the exception of two pairs: The proportion of cliquemate nominations did not differ between *prosocial* and *cool* (p=.46), or between overt aggression and bully (p=1.00). As hypothesized, children nominated their cliquemates more often for characteristics with positive reputations (e.g., prosocial, cool) than for characteristics with negative reputations (overt aggression, relational aggression, bully). The proportion of cliquemate nominations for *influence* was higher than that for the three aggression items but lower than that for *prosocial* and *cool*.

Proportion of Cliquemates Nominations for Social Status

In this section, we examined whether the proportion of cliqumate nominations differs across social status variables. The means and standard deviations of the proportion of cliquemates nominated for the four social status indicators are presented in Figure 2. Consistent with the analytic procedure used in the prior section, repeated measures one-way analysis of variance was conducted. Results indicated that the sphericity assumption was again violated, as indicated by a statistically significant [$\chi^2(5)=92.33$, p<.001] Mauchly test of sphericity. Thus, the Huynh-Feldt ($\varepsilon = .86$) corrected test was used. The Huynh-Feldt adjusted within-subject test was statistically

significant [F(3, 939)=150.92, p<.001], suggesting that the cliquemate proportions differ across social status variables. A Bonferonni multiple comparison procedure was used to examine the contrast among cliquemate proportion scores. As expected, the difference between any pair of cliquemate proportions was statistically significant at the .05 level except for *like-least* and *least-popular* (p=1.00). As shown in Figure 2, the proportion of cliquemate nominations was highest for *like-most* followed by *most-popular*.

The Effect of Gender and Grade on the Proportion of Cliquemate Nominations for Social and Behavioral Characteristics

The goal of analyses in this section was to examine the effect of gender and grade on the proportion of cliquemates nominated for various social and behavioral characteristics. At the same time, it was expected that the proportion of cliquemate nominations would be higher if a child belonged to a bigger clique. In fact, the correlation between a child's clique size and the proportion of cliquemate nominations for the six items ranged from .27 to .42, and they were all statistically significant at the p<.001 level. Thus, in order to control for the effect of clique size on cliquemate proportions, a multivariate analysis of covariance (MANCOVA) was conducted with cliquemate proportions for the six social and behavioral characteristics as dependent variables, grade and gender as independent variables, and clique size as a covariate.

The omnibus MANCOVA results revealed a statistically significant effect of clique size (Wilks' Λ =.59, F=29.48, p=.00), grade (Wilks' Λ =.92, F=1.89, p=.03), and gender (Wilks' Λ =.84, F=8.16, p=.00). The omnibus interaction effect between gender and grade was not statistically significant (Wilks' Λ =.94, F=1.40, p=.16). The results of univariate tests for gender and grade, along with the means and standard deviations of cliquemate proportions for the six variables by gender and grade, are presented in Table 1. After controlling for the effect of clique

size, statistically significant gender effects were found for *cool*, *overt aggression*, *relational aggression*, and *bully* nominations. Pairwise comparisons indicated that male children nominated more cliquemates for *cool*, *overt aggression*, and *bully* than did female children. In contrast, female children nominated more cliquemates for *relational aggression* than did male children.

Statistically significant grade effects were also found, after controlling for the effect of clique size, for *prosocial* and *cool*. Follow-up Bonferroni pairwise comparisons indicated that 4th grade children nominated more cliquemates for *prosocial* and *cool* than did 5th grade children. The cliquemate proportions of 3rd grade children on the two variables did not differ from those of 4th and 5th grade children, however.

The Effect of Gender and Grade on the Proportion of Cliquemates Nominated for Social Status Indicators

The goal of analyses in this section was to examine the effect of gender and grade on the proportion of cliquemate nominations for social status indicators. Similar to the analytic procedure explained in the prior section, a multivariate analysis of covariance (MANCOVA) was conducted with the four cliquemate proportions for social status variables as dependent variables, gender and grade as independent variables, and clique size as a covariate. The correlation between a child's clique size and cliquemate proportions was significant for all social status variables at the p<.001 level with the single exception of *like-least* (r=.04, p=.43).

The omnibus MANCOVA results revealed statistically significant effects of clique size (Wilks' Λ =.75, F=27.32, p=.00) and grade (Wilks' Λ =.92, F=3.67, p=.00). The omnibus effects were not statistically significant for gender (Wilks' Λ =.98, F=1.92, p=.11) or for the interaction between gender and grade (Wilks' Λ =.99, F=.45, p=.89). Because the omnibus MANCOVA result was not significant for gender, the univariate test was conducted for grade only. The

results of univariate tests for grade along with the means and standard deviations of cliquemate proportions by gender and grade for the social status indicators are presented in Table 2. After controlling for the effect of clique size, statistically significant grade effects were found for *like-most* and *most-popular* nominations. Thus, follow-up Bonferroni pairwise comparisons were conducted for those two variables. Fourth grade children were found to nominate more cliquemates for *like-most* than did 5th grade children. Third grade children did not differ from either 4th or 5th grade children in terms of cliquemate nominations for *like-most*. For *most-popular*, both 3rd and 4th grade children nominated more cliquemates than did 5th grade children. Third and fourth grade children did not differ in the proportion of cliquemate nominations for *most-popular*.

Discussion

The current study was derived from two motives. First, although peer behavior nominations have been long used to assess children's behavioral and social reputations as well as social status, relatively little has been studied regarding *from whom* children receive nominations. Second, we were interested in the manner in which children's clique memberships affect their peer nomination patterns. Specifically, it was hypothesized that children's clique membership would favorably affect their perceptions toward cliquemates, given that individuals tend to display favoritism toward their in-group members (Tajfel, 1978) and relationships among clique members are likely characterized by positive social exchanges (Newcomb & Bagwell, 1995). The current study examined the effect of children's clique membership on peer nominations on a broad range of social and behavioral characteristics and social status indicators among third through fifth grade children. Results of the study supported the hypothesis that children tend to nominate their cliquemates more often for positive characteristics (e.g., prosocial, cool) and high

social status indicators (like-most, most-popular) than for negative characteristics (e.g., aggression, bully) and low social status indicators (like-least, least-popular). Gender and grade level also impacted the proportion of cliquemates nominated for some items under consideration.

Whereas classroom-based behavior nominations are typically used at the elementary school level, given that the majority of children's peer interactions take place within their classroom, we used a grade-based nomination procedure in order to reflect the frequent cross-classroom interactions noted in the participating schools. Thus, children were allowed to list any participating grademates for the clique identification measure (i.e., SCM) as well as the behavior and social status nominations. It is perhaps not surprising that compared to the cliques identified in the classroom level, the range of clique size as well as the average clique size was larger when cliques were identified within the grade level unit. However, gender differences in clique size were not found in the current study, as they have been in previous studies in which cliques were identified within classroom (e.g., Kwon & Lease, 2007). This suggests that the structural characteristics of cliques might differ depending on whether cliques are identified within the classroom versus the grade level unit. Further examination of whether cliques found at the classroom level stay intact at the grade level seems necessary.

Whereas children were allowed to nominate up to 10 peers for each characteristic in the study, they listed between 2 and 4 peers on average. This seemingly supports the idea that it might be adequate to allow children to nominate three to four peers in a behavior nomination procedure. As expected, the proportion of cliquemate nominations was greater for positive reputations than for negative reputations. About 50% of children's nominations were given to cliquemates for *prosocial* and *cool*, whereas between 15% and 26% nominations were given to cliquemates for various aggression items. It could be that, in general, children maintain positive

relationships with their cliquemates, and/or they demonstrate positive perceptual biases toward children's own cliquemates.

Among the aggression items, the proportion was higher for *relational aggression* than for *overt aggression* and *bully*. LaFreniere and Charlesworth (1983) suggested that aggression is often directed at those who are close by in the social network, and this might be particularly true for relational aggression. Also, it might take greater intimate knowledge for children to be relationally aggressive toward their peers (Cohen, Hsueh, Russell & Ray, 2006). The *influence* item was of interest in terms of the degree to which children perceive influence from their cliquemates. About a third of the *influence* nominations were given to children's cliquemates. It should be noted, however, that influence could have been perceived as either positively or negatively valenced as the item was described in a neutral manner (i.e., this person has a lot of influence or a big effect on how other kids act).

Although it was beyond the scope of this study, the proportion of cliquemate nominations for various behavioral and social characteristics might be further affected by clique-level characteristics beyond those indicated by clique membership. In a recent study, Kwon and Lease (2007) identified different clique profiles, including *Average*, *Withdrawn*, *Tough*, *Incompetent/aggressive*, and *Competent*, based on mean scores of various behavioral characteristics of clique members. For example, *Competent* cliques are characterized by elevated levels of positive characteristics (e.g., prosocial, fun, smart) whereas *Tough* and *Incompetent/aggressive* cliques are characterized by elevated levels of aggression. It would be interesting to examine whether the proportion of cliquemate nominations for positive and negative characteristics differ between children in *Competent* cliques and those in *Tough* or *Incompetent/aggressive* cliques. However, it is also possible that children exhibit positively-

biased perceptions toward their cliquemates regardless of the overall behavioral characteristics of their clique. For example, a recent study (Kwon & Lease, unpublished manuscript) demonstrated that the more strongly children identify with their friendship group, the more they tend to rate their group high on positive characteristics (e.g., academic functioning) and low on negative characteristics (e.g., aggression). Also, given the finding that individuals' aggression is supported by their cliquemates (Cairns et al., 1988), children in an aggressive clique might not perceive their cliquemates to be aggressive who are perceived to be aggressive by the overall peer group.

The results of the study suggest that the clique serves as a significant determinant of children's social status. Over 60% of children's *like-most* nominations and about 40% of *most*popular nominations were given to their own clique members. This appears to provide an explanation, to some extent, for a positive relationship between the size of a child's peer cluster and his or her likeability and popularity (Benenson, 1990; Ladd, 1983). That is, children who belong to a large social cluster might have a better chance to acquire high social status given the likelihood of children nominating their own clique members for high social status indicators. Also, the high proportion of nominations given to children's own cliquemates suggests that a child's social status as determined by the sum of nominations he or she receives from the overall peer group (e.g., classroom, grade) might be somewhat "artifactual." That is, a child's social status appears to be determined not only by his or her characteristics but also by the size of the clique to which she or he belongs. The higher proportion of *like-most* nominations over *most*popular nominations given to children's own cliquemates was not surprising because the former likely pertains to within-clique relationships to a great extent than the latter. This also suggests that social preference (i.e., like-most) – as a type of social status – is more likely to be affected by children's peer group membership than is perceived popularity (i.e., most-popular). It

warrants further investigation of high social status children regarding their source of status support. For example, children who receive high social status support from the broader social network might have greater influence on peers than those who receive status support primarily from their own clique members.

In contrast to the high social status indicators, about 80% of children's *like-least* and *least-popular* nominations were given to out-of-clique peers. This suggests that children's low social status, including peer rejection, might also be affected by children's peer network patterns, including clique membership. Whereas the typical practice of identifying rejected children is based on the sum of nominations a child receives from the overall peer group, peer experiences of rejected children might differ depending on from whom they receive those nominations. For example, a child who receives *like-least* or *least-popular* nominations primarily from non-clique members might not be perceived as such by his or her own cliquemates. In fact, studies have demonstrated that over half of low-accepted children had a reciprocal friendship (Parker & Asher, 1993), and preschool children who were rejected maintained different positions in the social network (Johnson, Poteat & Ironsmith, 1991). The results of this study consistently support the importance of understanding peer rejection in the context of a child's peer network as well as in the overall peer group (i.e., classroom, grade).

Gender differences in cliquemate nominations were indicated for some of the behavioral and social characteristics studied. Male children nominated more cliquemates for *cool*, *overt* aggression, and *bully* than did female children, whereas the opposite pattern was found for relational aggression. The gender difference in cliquemate nominations for different types of aggression supports previous research on aggression: Overt and physical types of aggression are characteristic of the ways in which boys aggress, whereas relational aggression is characteristic

of girls (Crick & Grotpeter, 1995). Also, being *cool* might be more characteristic of boys than of girls given the demonstrated relationship between being *cool* and being aggressive and athletic (Lease et al., 2002; Rodkin et al., 2000). Contrary to our hypothesis, boys and girls were similar regarding the manner in which they perceive their cliquemates to be *prosocial*, however. Also, no gender difference was indicated for cliquemate nominations for social status indicators.

The grade effect on the proportion of cliquemate nominations for positive versus for negative characteristics was somewhat different from our hypothesis based on previous research. For example, Scarlett, Press, and Crockett (1971) found that, among boys in grades 1, 3, and 5, children's perceptions toward their peers become more non-egocentric or objective with increased age. In a similar vein, we hypothesized that children's cliquemate nominations for positive characteristics would be higher for third graders than for fifth graders. However, the gender difference was primarily found between fourth and fifth graders. That is, as compared to fifth grade children, fourth grade children nominated more cliquemates for prosocial, cool, likemost, and most-popular. The difference between third and fifth graders was found only for mostpopular: Third graders nominated more cliquemates for most-popular than did fifth graders. The results appear to suggest that the impact of clique membership on children's positively-biased perceptions toward their group members reaches its peak in fourth grade, at least when examined within the developmental frame of third to fifth grade. However, more replication studies are necessary in order to make a generalization of a grade or age effect. Also, given that third through fifth grade children are close in age, developmental differences in peer perceptions might be better revealed with children who are farther apart in age.

In conclusion, the current study is believed to make a unique contribution to the literature in that it is one of the few empirical studies that have quantified the effect of children's clique membership on their peer nomination patterns. The importance of considering children's peer group and network in assessing children's social reputation and social status has been proposed by many researchers (e.g., Jonhson, Ironsmith & Poteat, 1994; Rodkin et al., 2006). The results of this study supported that children's peer nominations for various behavioral and social characteristics as well as social status indicators are systematically affected by their clique membership. However, the effect of children's clique membership on the way they distribute their nominations across peers is often overlooked in the typical peer nomination method, in which children's social reputation and status are determined by the sum of nominations received by the overall peer group. Future studies need to carefully consider the source of reputational support for various behavioral and social characteristics, including aggression, bullying, peer rejection, and social influence, which have been found to have significant implications for children's peer experiences.

References

- Benenson, J. F. (1990). Gender differences in social networks. *Journal of Early Adolescence*, 10(4), 472-495.
- Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development*, *53*(6), Dec 1982. pp. 1447-1460.
- Bigler, R. S., Jones, L. C. & Lobliner, D. B. (1997). Social categorization and the foundation of intergroup attitudes in children. *Child Development*, 68(3), 530-543.
- Björkqvist, K., Lagerspetz, K. M. & Kaukiainen, A. (1992). Do girls manipulate and boys fight?

 Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*,

 18(2), 117-127.

- Bukowski, W. M., Newcomb, A. F. & Hartup, W. W. (1996). *The company they keep:*Friendship in childhood and adolescence. New York, NY: Cambridge University Press.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S. D. & Gariépy, J. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology*, 24(6), 815-823.
- Cairns, R. B., Perrin, J. E. & Cairns, B. D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence*, *5*(3), 339-355.
- Cairns, R. B., Leung, M.-C., Buchanan, L. & Cairns, B. D. (1995). Friendships and social networks in childhood and adolescence: Fluidity, reliability, and interrelations. *Child Development*, 66(5), 1330-1345.
- Cairns, R. B., Leung, M.-C. & Cairns, B. D. (1995). Social networks over time and space in adolescence. In Crockett, L. J. & Crouter, A. C. (Eds.), *Pathways through adolescence: Individual development in relation to social contexts* (pp. 35-56). New Jersey: Lawrence Erlbaum Associates.
- Card, N. A., Hodges, E. V. E., Little, T. D. & Hawley, P. H. (2005). Gender effects in peer nominations for aggression and social status. *International Journal of Behavioral Development*, 29(2), 146-155.
- Cohen, R., Hsueh, Y., Russell, K. M. & Ray, G. E. (2006). Beyond the individual: A consideration of context for the development of aggression. *Aggression and Violent Behavior*, 11, 341-351.
- Coie, J., Dodge, K. A. & Coppotelli, H. (1982). Dimensions and types of social status: A crossage perspective. *Developmental Psychology*, 18(4), 557-570.

- Crick, N. R. & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66(3), 710-722.
- Crockett, L., Losoff, M. & Petersen, A. C. (1984). Perceptions of the peer group and friendship in early adolescence. *Journal of Early Adolescence*, 4(2), 155-181.
- Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry*, 42(5), 565-579.
- Ennett, S. T. & Bauman, K. E. (1994). The contribution of influence and selection to adolescent peer group homogeneity: The case of adolescent cigarette smoking. *Journal of Personality and Social Psychology*, 67(4), 653-663.
- Gest, S. D., Farmer, T. W., Cairns, B. D. & Xie, H. (2003). Identifying children's peer social networks in school classrooms: Links between peer reports and observed interactions. *Social Development*, 12(4), 513-529.
- Grotpeter, J. K. & Crick, N. R. (1996). Relational aggression, overt aggression, and friendship. *Child Development*, 67(5), 2328-2338.
- Hallinan, M. T. (1980). Patterns of cliquing among youth. In H. C. Foot & A. J. Chapman (Eds.), *Friendship and social relations in children*. (pp. 321-342): Transaction Publishers.
- Haynie, D. L. (2001). Delinquent peer revisited: Does network structure matter? *American Journal of Sociology*, 106(4), 1013-1057.
- Hogg, M. A. & Abrams, D. (1990). Social motivation, self-esteem, and social identity. In D.Abrams & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances*(pp. 28–47). New York: Springer-Verlag.

- Johnson, J., Ironsmith, M. & Poteat, G. M. (1994). Assessing children's sociometric status:

 Issues and the application of social network analysis. *Journal of Group Psychotherapy,*Psychodrama and Sociometry,
- Johnson, J., Poteat, G. M. & Ironsmith, M. (1991). Structural vs. marginal effects: A note on the importance of structure in determining sociometric status. *Journal of Social Behavior and Personality*, 6, 489-508.
- Kenny, D. A. (1994). Using the social relations model to understand relationships. In Erber, R. & Gilmour, R. (Eds.), *Theoretical frameworks for personal relationships* (pp. 111-127). Hillsdale, NJ, England: Lawrence Erlbaum Associates.
- Kindermann, T. A. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. *Developmental Psychology*, *29*(6), 970-977.
- Kwon, K. & Lease, A. M. (2007). Clique membership and social adjustment in children's same-gender cliques: The contribution of the type of clique to children's self-reported adjustment. *Merrill-Palmer Quarterly*, 53(2), 216-242.
- Kwon, K. & Lease, A. M. (2008). Children's social identification with a friendship group:

 Moderating effect on conformity to friendship group norms and perceived similarity.

 Unpublished manuscript.
- Ladd, G. W. (1983). Social networks of popular, average, and rejected children in school settings. *Merrill-Palmer Quarterly*, 29(3), 283-307.
- LaFreniere, P. J. & Charlesworth, W. R. (1983). Dominance, attention, and affiliation in a preschool group: A nine-month longitudinal study. *Ethology and Sociobiology*, *4*, 55-67.
- Lease, A. M., Kennedy, C. A. & Axelrod, J. L., (2002). Children's social constructions of popularity. *Social Development*, 11, 87-109.

- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Malloy, T. E., Sugarman, D. B., Montvilo, R. K. & Ben-Zeev, T. (1995). Children's interpersonal perceptions: A social relations analysis of perceiver and target effects. *Journal of Personality and Social Psychology*, 68(3), 418-426.
- Malloy, T. E., Yarlas, A., Montvilo, R. K. & Sugarman, D. B. (1996). Agreement and accuracy in children's interpersonal perceptions: A social relations analysis. *Journal of Personality and Social Psychology*, 71(4). 692-702.
- Masten, A. S., Morison, P. & Pellegrini, D. S. (1985). A revised class play method of peer assessment. *Developmental Psychology*, 21(3), 523-533.
- Morison, P. & Masten, A. S. (1991). Peer reputation in middle childhood as a predictor of adaptation in adolescence: A seven-year follow-up. *Child Development*, 62(5), 991-1007.
- Newcomb, A. F. & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin*, 117(2), 306-347.
- Parker, J. G. & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction.

 *Developmental Psychology, 29(4), 611-621.
- Parkhurst, J. T. & Hopmeyer, A. (1998). Sociometric popularity and peer-perceived popularity:

 Two distinct dimensions of peer status. *Journal of Early Adolescence*, 18, 125-144.
- Perry, D. G., Kusel, S. J. & Perry, L. C. (1988). Victims of peer aggression. *Developmental Psychology*, 24(6), 807-814.
- Rodkin, P. C., Farmer, T. W., Pearl, R. & Van Acker, R. (2000). Heterogeneity of popular boys: Antisocial and prosocial configurations. *Developmental Psychology*, *36*(1), 14-24.

- Rodkin, P. C., Farmer, T. W. Pearl, R. & Van Acker, R. (2006). They're Cool: Social Status and Peer Group Supports for Aggressive Boys and Girls. *Social Development*, *15*(2), 175-204.
- Ryan, A. M. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development*, 72(4), 1135-1150.
- Salmivalli, C., Huttunen, A. & Lagerspetz, K. M. J. (1997). Peer networks and bullying in schools. *Scandinavian Journal of Psychology*, *38*, 305-312.
- Scarlett, H. H., Press, A. N. & Crockett, W. H. (1971). Children's descriptions of peers: A Wernerian Developmental Analysis. *Child Development*, 42(2), 439-453.
- Schneider, B. H. (2000). *Friends and enemies: Peer relations in childhood*. New York: Oxford University Press.
- Tajfel, H. (1978). Differentiation between social groups. London: Academic Press.
- Yee, M. D. & Brown, R. (1992). Self-evaluation and intergroup attitudes in children aged three to nine. *Child Development*, *63*, 619-629.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*.

 Cambridge, England: Cambridge University Press.

Table 1-1. Univariate Tests, Means, and Standard Deviations for Social and Behavioral Characteristics by Gender and Grade

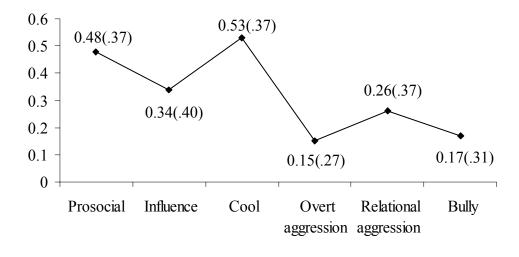
	Cliquemate proportions by Gender and Grade									
	Gender		F-test		F-test					
Behavioral/Social	Male	Female	d.f.	3	4	5	d.f.			
Characteristics	(N=107)	(N=164)	(1, 264)	(N=56)	(N=93)	(N=122)	(2, 264)			
	M(SD)	M(SD)		M (SD)	M (SD)	M (SD)				
Prosocial	.45 (.39)	.53 (.34)	3.02	.50 (.38)	.55 (.38)	.46 (.33)	3.97*			
Influence	.37 (.42)	.37 (.40)	.10	.38 (.45)	.31 (.40)	.40 (.40)	1.69			
Cool	.60 (.35)	.51 (.35)	9.10**	.53 (.41)	.61 (.36)	.52 (.32)	4.23*			
Overt aggression	.22 (.32)	.12 (.21)	13.46***	.15 (.26)	.13 (23)	.18 (.28)	.80			
Relational	.21 (.32)	.32 (.38)	4.44*	.27 (.37)	.27 (.37)	.29 (.35)	.56			
aggression										
Bully	.27 (.39)	.13 (.24)	19.82***	.21 (.36)	.15 (.30)	.20 (.32)	2.34			

^{*} p<.05, ** p<.01, *** p<.001

Table 1-2. Univariate Tests, Means, and Standard Deviations for Social Status Indicators by Gender and Grade

	Cliquemate Proportions by Gender and Grade									
	Ger	nder		F-test						
Social Status	Male	Female	3	4	5	d.f.				
	(N=137)	(N=203)	(N=70)	(N=116)	(N=154)	(2, 333)				
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)					
Like-most	.70 (.32)	.67 (.32)	.70 (.34)	.73 (.30)	.63 (.32)	5.31**				
Like-least	.20 (.34)	.21 (.33)	.23 (.38)	.21 (.34)	.19 (.31)	1.82				
Most-popular	.42 (.37)	.48 (.38)	.51 (.43)	.46 (.38)	.42 (.35)	7.72**				
Least-popular	.18 (.32)	.24 (.34)	.23 (.36)	.19 (.29)	.23 (.34)	.46				

Note. The univariate test was not conducted for gender because the omnibus MANOVA was not significant for gender. ** p<.01



Proportion of Cliquemate Nominations

Figure 1-1. Means and standard deviations (in parentheses) of proportion of cliquemate nominations for social and behavioral characteristics

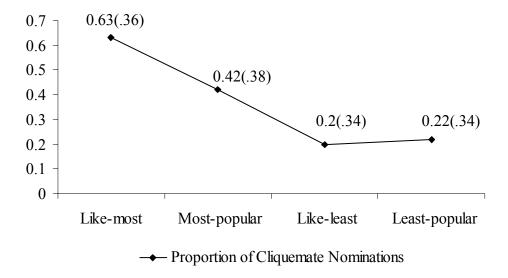


Figure 1-2. Means and standard deviations (in parentheses) of proportion of cliquemate nominations for social status indicators

CHAPTER 3

CHILDREN'S SOCIAL IDENTIFICATION WITH A FRIENDSHIP GROUP: A MODERATING EFFECT ON CONFORMITY TO FRIENDSHIP GROUP NORMS AND PERCEIVED SIMILARITY 2

² Kwon, K. and Lease, A. M. To be submitted to Social Development

Abstract

This study examined the moderating effect of children's social identification with their friendship group on the relationship between (a) children's perceived friendship group norms and their intent to conform to the norms and (b) children's assessment of their own functioning within activity domains and corresponding perceived friendship group norms (i.e., perceived similarity). Social identification was defined as having three dimensions: *in-group ties*, *in-group affect*, and *cognitive centrality* (Cameron, 2004). Participants were 455 third through fifth grade children enrolled in four rural elementary schools. A stronger relationship was found between children's perceived friendship group *trend* and *misbehavior* norms and their intent to conform to those norms when they reported higher levels of social identification with their friendship group. Perceived similarity between children and their friendship group members in *academic*, *trend*, *misbehavior* domains was also stronger when they reported higher levels of social identification. Overall, the moderating effect was more substantial for *in-group ties* and *in-group affect* than for *cognitive centrality*.

Introduction

Social psychologists and developmental psychologists have long recognized that the group in which an individual is a member significantly affects his or her beliefs, attitudes, and social behaviors (e.g., Bronfenbrenner, 1979; Hartup; 1983; Newcomb, 1950). However, it was not until relatively recently that the effect of peer groups on the development of children and adolescents has received empirical consideration. Studies have shown that involvement in different types of peer groups (e.g., cliques, friendship groups, crowds) affects many aspects of the social and academic functioning of children and adolescents, including self-esteem (Brown & Lohr, 1987), aggression (Cairns, Cairns, Neckerman, Gest & Gariépy, 1988), delinquency (Ennett & Bauman, 1994; Haynie, 2001), and academic motivation and achievement (Kindermann, 1993; Ryan, 2001).

An important and related question concerns the social and psychological processes that underlie the peer group's influence on children. Theories that have been posed to explain *friends*' influence on one another might shed light on *peer group* influence. For example, Berndt (1999) discussed two factors which help explain the degree to which children and adolescents are influenced by their friends. First, friends' characteristics, attitudes, and behaviors affect individuals through observational learning (Bandura, 1977), reinforcement, and punishment.

Second, the relationship features of friendships also matter. For example, Berndt, Hawkins, and Jiao (1999) demonstrated that friendships contribute to students' positive adjustment outcomes, when the friendships are featured by high relationship quality, such as intimacy, faithfulness, and exclusiveness. Similarly, friends' negative influence on deviant behaviors has also been found to be greater when their relationship is strong and/or the individual is strongly bonded with his or her friends (Agnew, 1991; Tremblay, Mâsse, Vitaro & Dobkin, 1995).

Although theories of friends' influence are useful for explaining the manner in which children might be influenced by peers, they do not necessarily consider processes that uniquely apply to a child's involvement in a peer group. In the current study, we approached the effect or influence of a peer group on a child by employing a social identity perspective. Specifically, Tajfel (1978) defines social identity as "that part of an individual's self-concept which derives from his or her knowledge of his or her membership in a social group (groups) together with the value and emotional significance attached to that membership" (p. 63). This definition implies that social identity is closely tied to an individual's group membership. In this sense, social identity is distinguished from personal identity, which is defined primarily by traits unique to the individual (Luhtanen & Crocker, 1992). Thus, when individuals categorize themselves as a member of a group, the group membership becomes a part of their self-definition. Social identity theory (SIT) was initially developed to explain in-group favoritism and out-group discrimination in a "minimal group" paradigm, where subjects are assigned to an artificial group in an experimental setting (Tajfel, Billig, Bundy & Flament, 1971). Thus far, SIT has predominantly been studied with regard to large-scale social categories (e.g., nation, ethnicity, social classes) to account for intergroup relations and group processes (see Tajfel & Turner, 1986).

Social identity theory is believed to provide a useful perspective on the influence of various social groups on an individual. When people identify themselves as a member of a social group, "people bring their behavior into line with the behavioral expectations of others to the extent that those specific others are valued and important" (Terry & Hogg, 1996, p. 779). Accordingly, as individuals more strongly identify with a group, they are more likely to adopt the beliefs and behaviors that are accepted and valued by the group; conversely, if individuals do not closely identify with the group, then they are less likely to adopt that group's practices. This is different

from the *social pressure* by which people force others to follow certain norms by punishing or rejecting non-normative behaviors (Berndt, 1999). According to Berndt (1996), social pressure does not appear to be a critical process by which individuals are influenced by their peers, especially peers who are friends. Rather, Sherif and Sherif (1964) demonstrated that adolescents appear to conform to group norms voluntarily in order to gain a sense of belongingness and approval by their peer group.

The current study is designed to investigate children's social identification with a "friendship group" to which they perceive themselves to belong. The definition of friendship group is discussed in the next section. Most studies of social identification have been conducted with adults, and only a small number of studies have examined social identification with a peer group among adolescents (e.g., Kiesner, Cadinu, Poulin & Bucci, 2002; Tarrant, MacKenzie & Hewitt, 2006). However, little is known about identification with a peer group among children in middle childhood despite the evidence that children in this stage begin to actively participate in exclusive peer groups (Crockett, Losoff, & Petersen, 1984).

Drawing from theoretical (Tajfel, 1978) and empirical grounds (e.g., Cameron, 2004), the current study treated social identity as multi-faceted. Our first goal was to examine factors that contribute to different facets of social identification with children's friendship group. Next, we examined the moderating effect of social identification with regard to two aspects of children's peer-related experiences. Applying the social identification perspective to the case of children's peer groups, the degree to which children align their perceptions and behaviors with their friendship group norms should be related to how strongly they identify with their friendship group. Thus, our second goal was to examine whether the relationship between friendship group norms and children's conformity to those norms is greater when they strongly identify with their

friendship group than when they do not. The final goal was to examine whether children perceive greater similarity between themselves and their friendship group members when their level of social identification is stronger.

<u>Definition and Measurement of Peer Groups</u>

Child and adolescent peer groups can be described from different perspectives; there is not a single definition, measurement, or analysis of these groups (Cairns, Xie & Leung, 1998). Instead, different methods and analytic procedures have been suggested regarding their identification. One of the conceptual distinctions of the different methods lies in the source of informants. Some methods rely on self-reported friendships (e.g., Ennett & Bauman, 1994; Urberg, Değirmencioğlu, Tolson & Halliday-Scher, 1995), whereas others use multiple informants to assess children's peer affiliation patterns (e.g., Cairns, Perrin & Cairns, 1985). There appear to be different assumptions and beliefs regarding which source of informant to use. The multipleinformant method assumes that peer affiliation patterns in a context (e.g., classroom) are publicly known and perceived similarly by individuals within that context (Kindermann, 1998). Also, the multiple-informant method is not subject to a self-report bias, which can result in an over-report of socially desirable peer affiliations and an under-report of socially undesirable peer affiliations (Leung, 1996). In contrast, Kiesner and colleagues (2002) have argued that self-report of peer group membership (i.e., a group to which an individual perceives himself or herself to belong) is important to consider because an individual is more likely to be influenced by a group with which he or she subjectively identifies.

In this study, we used a self-report procedure to identify children's peer groups. Specifically, children were asked to list "a group of friends with whom you spend time and do a lot of things together." This group was termed "friendship group" and served as the operational definition of

the relevant peer group in this study. Our definition of the friendship group was aimed to serve two goals. First of all, self-reported friendship group membership, as opposed to group membership determined by peer report, appeared to be more pertinent to the process of social identification, which is subjective in nature. Secondly, by emphasizing "a group of friends" we aimed to tap into a group-level peer relationship, not a dyadic relationship, in which children are bounded by a common group membership.

Multidimensionality of Social Identification

Tajfel's (1978) definition of social identity, which suggests that social identity is a multidimensional construct, has influenced the development of various measures of social identification. For example, Brown, Condor, Mathews, Wade, and Williams (1986) suggested that social identification includes three facets: awareness of group membership; group evaluation; and emotional aspects of belonging. More recently, Cameron (2004) demonstrated, through the use of factor analytic procedures, that social identity can be parsed into three related components: *In-group ties*, *in-group affect*, and *cognitive centrality*. *In-group ties* refers to individuals' perceptions of connectedness and belongingness to the group (e.g., 'I fit in this group'). Next, *in-group affect* is related to the emotions or the valence attached to the group membership (e.g., being glad or regretful). Finally, *cognitive centrality* concerns cognitive salience of group membership (e.g., I often think about the fact that I am a member of this group) and the subjective importance of the group membership (e.g., In general, being a group member is an important part of my self-image).

In previous studies with adolescents (Kiesner et al., 2002; Tarrant et al, 2006), social identification has been treated as a unidimensional construct. In contrast, we examined multidimensional aspects of children's social identification with their friendship group,

following Cameron's (2004) three-factor model of social identity developed for adults. Although the three dimensions (i.e., *in-group ties*, *in-group affect*, and *cognitive centrality*) are related to each other, discriminant validity evidence suggests that they tap into different facets of social identification (Cameron, 2004). That is, it is possible that satisfaction in one domain does not assure satisfaction in another domain. For example, individuals who think their friendship group membership is important (i.e., high *cognitive centrality*) might not feel they fit in the group (i.e., low *in-group ties*). In a similar vein, the moderating effects of the three facets of social identification might differ from one another.

Contributing Factors to Identification with a Friendship Group

What might contribute to children's social identification with their friendship group? Based on the findings of previous studies, we examined gender, social status, and the reciprocation of friendship group membership.

First, research has shown that, as compared to male adolescents, females display higher levels of peer group identification (Kiesner et al., 2002; Tarrant et al., 2006) and consider crowd (i.e., reputation-based group) affiliation to be more important (Brown, Eicher & Petrie, 1986). Also, friendship research suggests that females' relationships are featured by greater intimacy than those of males (Berndt, 1982). The current study examined whether similar gender differences hold for children in middle childhood: Do females report higher levels of social identification with their friendship group than do males in this developmental period?; Do males and females differ with regard to the particular facet of identification that is more important?

Second, various social status indicators have been suggested as related to social identification with different types of peer groups. Kiesner and colleagues (2002) found that individuals who are well accepted by peers reported higher levels of identification with their peer group as

compared to those who are less accepted by peers. Also, Brown and Lohr (1987) demonstrated that adolescents who belonged to a crowd with a prestigious reputation expressed higher interest in and valuing of belonging to a crowd than those who belonged to less well-regarded crowds. In this study, we used perceived popularity (i.e., 'who is *most popular* at school?') as an indicator of social status. We examined whether popular children value their friendship group membership more and, thus, more strongly identify with their friendship group than do less popular children, or whether there is a particular facet of social identification that is more important for popular children.

Finally, the degree to which a child's friendship group nominations were reciprocated (i.e., if child A nominates B in his or her friendship, child B also nominates A in his or her friendship group) was considered as a contributing factor to social identification with the friendship group. A higher degree of reciprocated friendship group nominations likely indicates a clearer membership boundary and a more cohesive membership. Kiesner and colleagues (2002) have demonstrated that adolescents who received more reciprocations from their reported group members also endorsed stronger identification with their peer group as compared to those who received fewer reciprocations. Thus, we expected that the degree to which friendship group nominations are reciprocated would be positively associated with children's social identification, particularly with *in-group ties* and *in-group affect*, with their friendship group.

Overall, it is hypothesized that being a female, being popular, and having higher levels of reciprocated nominations with the friendship group would be associated with children's having higher levels of social identification with their friendship group.

Moderating Effects of Social Identification on Children's Conformity to Friendship Group Norms and Perceived Similarity

The social identification process suggests that individuals tend to align their beliefs, attitudes, and behaviors with what is accepted by the group with which they strongly identify (Terry & Hogg, 1996). Evidence suggests that social identification moderates the group's influence on an individual's behaviors and attitudes, at least among adolescents and young adults. For example, Kiesner and colleagues (2002) found that the peer group had little influence on adolescents when their social identification with the peer group was low, whereas significant peer group influence was found for those with average or high levels of social identification. Specifically, even after controlling for the adolescent's Year 1 delinquency, the relation between the group's Year 1 delinquency and an adolescent's Year 2 delinquency was stronger for the individual who reported higher levels of group identification. In another study, Terry and Hogg (1996) examined college students' intentions to engage in regular exercise and college females' intentions to engage in sun-protective behavior using friends and peers at their university as a reference group. The results indicated that participants reported greater intentions to follow the group norms (i.e., engaging in regular exercise and sun-protective behavior) when they strongly identified with the reference group.

For children, little is known about the effect of social identification with the friendship group on functioning and interpersonal perceptions, including conformity to group norms and perceived similarity between children and their friendship group members. In the current study, we examined whether social identification with a child's perceived friendship group moderates the relationship between (a) a child's perceived friendship group norms and his or her intent to conform to the norms, and (b) a child's sense of his or her own functioning in different domains

of behaviors and perceived friendship group norms in corresponding domains. Based on pilot interviews with 3rd, 4th, and 5th grade elementary school children and teachers as well as a review of the literature (e.g., Sim & Koh, 2003), we examined three kinds of friendship group norms: *Academic*, *trend*, and *misbehavior*.

Friendship group norms might be established based on group members' shared characteristics and interests; an individual's behavior in the group, in turn, might be affected by those very group norms. For example, a certain type of dress code might become prevalent among friendship group members as children in the group develop a normative style. Children, in turn, might adopt the clothing style in order to "fit in." Further, children are more likely to be influenced by their friendship group norms when they more strongly identify with their friendship group as compared to when they less strongly identify with their friendship group.

The degree to which children identify with their friendship group might also moderate children's perceived similarity between themselves and their friendship group members.

Similarity between an individual and his or her friends and peer group members has been widely documented regarding various social and behavioral characteristics (see review by Gifford-Smith & Brownell, 2003). This so called "peer group homophily" phenomenon has been explained by selection and socialization effects. That is, children select to affiliate with those who are similar to themselves, and the similarity increases overtime through reinforcement of behaviors congruent with group norms and punishment of non-normative behaviors. Furthermore, the social identification process suggests that children who strongly identify with their friendship group are likely more motivated to follow friendship group norms. This, in turn, might affect their peer perceptions so that children perceive greater similarity between themselves and their friendship group members as they strongly identify with their friendship group.

In sum, we hypothesized that children would be more likely (a) to state an intent to change their behaviors and follow their friendship group norms and (b) to perceive greater similarity between themselves and their friendship group members when they also strongly identify with their friendship group. In this study, the perceived similarity between children and their friendship group members was determined by the relationship between children's self-perceived functioning in academic, trend, and misbehavior and friendship group norms in corresponding domains. We examined the moderating effect of social identification by each dimension (i.e., *ingroup ties*, *in-group affect*, *cognitive centrality*) because we expected that the moderating effect might vary across dimensions of social identification.

Method

Participants

The participants were 455 (237 girls, 218 boys) students from four rural, public elementary schools in the southeastern region of the United States. Students were enrolled in third (N=102), fourth (N=154), and fifth (N=199) grades. Overall, the sample was, according to school records, 77 % White, 13 % Black, and 9 % other ethnicities.

<u>Procedure</u>

Both active parental consent and child assent were required for study participation. School personnel in the participating schools informed the research team that students in their schools had considerable cross-classroom interactions with those in the same grade. Thus, all measures that involve peer nominations were grade-based (e.g., all 4th grade students at a given school), instead of classroom-based, and consent rate accordingly was calculated for each *grade level unit* (e.g., all 4th grade children at School 1). Parental consent and child assent were obtained for 81% of possible participants, and the grade-level unit participation rate ranged from 75% to 86%. A

minimum of 75% participation rate was required for any grade level unit to participate in this study. As part of a larger study on children's peer relations, the questionnaires used in this study were group administered in two one-hour sessions. Instructions for each measure were read aloud in the classroom by one of the researchers, and a second research team member circulated in the classroom to provide individual assistance. Confidentiality was discussed with participants before the administration of the survey, and they were also provided with an index card to cover their answers. Following the university's Institutional Review Board (IRB) guidelines, we included only the names of students whose parents gave consent on the peer nomination rosters. Accordingly, participants were allowed to nominate only participating peers from their grade level unit on any of the measures. For all peer nomination tasks, participants were provided with a roster of participating peers and numbers, and they were asked to write the number identifier linked with a nominated participant, rather than the child's name. During data collection, nonparticipating students were asked to read or draw quietly at their desks.

Measures

Self-reported friendship group. Participants were asked to list "a group of friends with whom you spend time and do a lot of things together." The group was called a *friendship group*, and children were told to refer to the group whenever subsequent questions were posed in relation to their friendship group. Consistent with the procedures of previous studies (e.g., Hallinan, 1981; Urberg, Değirmencioğlu & Pilgrim, 1997), children were allowed to list a group of up to 10 same- and opposite-sex peers from their grade level unit.

Reciprocation of friendship group membership. The level of reciprocation from the self-reported friendship group members was calculated in two steps, following the procedure suggested by Kiesner et al. (2002). First, the raw proportion of reciprocation was calculated by

dividing the number of reciprocated nominations by the total number of nominations each child made. For example, if a child listed ten peers for his or her friendship group, and four of them were reciprocated, the proportion of reciprocations was .4. Given that the raw proportion score depends on the number of nominations a child makes, the raw proportion score was regressed on the number of nominations. The residual was saved as a new proportion score that takes into account the number of nominations made.

Social identification with self-reported friendship group. Following the assessment of friendship membership, participants were instructed as follows: "Think about the group of kids that you just listed as being in your friendship group. For the next set of questions, we want to know what you think and feel about the group." Based on the theoretical and empirical foundation discussed in the Introduction, three aspects of social identification with a child's friendship group were measured. The measure was modified from the social identity measure originally developed by Cameron (2004) for a college student population to ensure that the contents and wording of the items were developmentally appropriate. Each subscale consisted of 4 items, and a 5-point response scale was used, ranging from "strongly disagree" to "strongly agree." The first facet, in-group ties (α =.70), concerned children's sense of connectedness and belongingness to their friendship group (e.g., "I feel that I belong to this group."). The second, in-group affect (α =.73), concerned emotions attached to the group membership (e.g., "I am glad that I am a member of this group."). The third, centrality (α =.39), tapped into the importance and cognitive salience of their friendship group membership (e.g., "Being a member of this group is an important part of who I am."). The reliability was low for *centrality*; however, all items were kept because the reliability did not improve even after certain items were eliminated.

Perceived popularity. Perceived popularity was assessed by asking children to nominate their grademates "who are the *most popular* at school" (Parkhurst & Hopmeyer, 1998). Ten spaces were provided for the nomination, and the number of most-popular nominations received by participants was standardized, within grade level unit and gender, to a mean of θ and a standard deviation of I. Scores were standardized by gender, given the tendency for children to nominate same-gender peers for social status variables (Card, Hodges, Little & Hawley, 2005). Standardization by grade level unit allows for comparisons between units of differing sizes.

Perceived friendship group norms and self-perceived functioning on friendship group norms. Three types of friendship group norms were examined for the purposes of this study: Academic, trend, and misbehavior. Four items were developed for each friendship group norm. Children were asked to think about members in their friendship group and determine how many of them are good at different activities and like to do them (e.g., How many of the kids in your group keep up with the latest trend [stylish clothes, new music, athletic shoes]?; How many of the kids in your group are smart and make good grades?). A 4-point response scale was used, ranging from "none" to "all." The Cronbach's alphas for academic, trend, and misbehavior norms were .74, .88, and .85, respectively.

For each domain of friendship group norms, children also were asked to rate themselves regarding the degree to which they are good at, and like to do, activities in each domain. Two items, on a 5-point response scale, were used to measure a child's sense of his or her own functioning in *academic* (α =.70), *trend* (α =.63), and *misbehavior* (α =.60) domains.

Self-report of intentions to conform to clique norms. Hypothetical vignettes were used to assess children's intentions to conform to their friendship group norms. The vignettes were constructed in correspondence to each of the friendship group norms described above. Each

vignette was structured to follow a framework that contained four elements: *Initiation*, *importance*, *activation*, and *cost*. *Initiation* referred to the beginning of a new activity or behavior by someone in the friendship group. *Importance* referred to the new behavior or activity being perceived to be important by other members in the friendship group. *Activation* referred to the activity or behavior being disseminated among other members in the group. Finally, *cost* referred to the time and energy that children were willing to "spend" in order to conform to the group norm. That is, would the child be willing to choose this activity over others if he/she had to choose?

The first part of each vignette included *initiation*, *importance*, and *activation* (e.g., Imagine that some kids started wearing something really trendy or listening to some cool new music. Most of the kids in your group have been talking about how cool it is. Some kids in your group also have started wearing it or listening to it.). Subsequently, children were asked how likely they would be to follow the particular norm. The second part of the vignette and question tapped into the idea that adopting the new norm would have an associated "*cost*" (e.g., Imagine that you wear other kinds of clothes or listen to other kinds of music; How likely would you be to switch to the new style or the new music instead?). A 5-point response scale was used, ranging from "not at all likely" to "very likely." Responses to two questions (i.e., how likely to follow the group norm; how likely to choose the new behavior/activity over a previously preferred one) were summed to create scores of intent to conform to friendship group norms in *academic* ($\alpha = .73$), *trend* ($\alpha = .83$), and *misbehavior* ($\alpha = .89$) domains.

Results

Descriptive Characteristics of Self-Reported Friendship Group

The mean number of peers children listed in their friendship group was 7.58 (SD=2.70). A 3 (grade) × 2 (gender) analysis of variance (ANOVA) was conducted to examine whether the number of friendship group nominations differed by grade and gender. Statistically significant main effects were found for grade [F(2, 449)=8.79, p<.001] and gender [F(1, 449)=6.25, p<.05]. Specifically, fifth graders (M=8.17, SD=.19) made more nominations than both third (M=7.17, SD=.26) and fourth (M=7.09, SD=.21) graders. Also, females (M=7.79, SD=.18) made more nominations than did males (M=7.15, SD=.18). The interaction between grade and gender on the number of friendship group nominations was not statistically significant [F(2, 449)=1.06, p=.35].

Given that the friendship group in this study was defined as the group to which a child perceives himself or herself to belong, it was also of interest to examine the degree to which a child's friendship group nominations were reciprocated. On average, 56% of children's friendship group nominations were reciprocated. A 3 (grade) \times 2 (gender) analysis of variance (ANOVA) was conducted to test whether the level of reciprocated nominations differed by grade and gender. As explained in the Method section, the residual of regressing the number of friendship group nominations on the raw proportion of reciprocation was used as the new reciprocation variable. With the new reciprocation score serving as the dependent variable, a statistically significant main effect was found for grade [F(2, 441)= 5.68, p<.01]. Post hoc analyses indicated a higher level of reciprocation rate for 5th grade children than for 3rd grade children. However, the main effect was qualified by a significant interaction between grade and gender [F(2, 441)=4.68, p<.05]. A subsequent simple effect analysis revealed a significant

gender difference for 4^{th} graders only [F(1, 441)=5.11, p<.05]: The reciprocation rate was higher for females than for males.

Predictors of Social Identification with a Friendship Group

What might contribute to a child's social identification with his or her friendship group? Gender, perceived popularity, and reciprocation of friendship group nominations were examined as predictors. Specifically, multiple regression analyses were conducted separately for each dimension of social identification (i.e., in-group ties, in-group affect, and centrality) as a dependent variable. The three predictor variables were entered simultaneously. The overall regression model was significant for *in-group ties* [F(3, 434)=7.09, p<.001], and the three predictors accounted for 4% of the variance in *in-group ties*. Of the three predictors, only the reciprocation of friendship group nominations was a significant predictor of *in-group ties* (β =.51, p<.01), in contrast to gender (β =-.05, p=.46) and perceived popularity (β =.06, p=.09). The overall regression model was significant for *in-group affect* [F(3, 434)=6.00, p<.01], with the three predictors accounting for 3.3% of the variability in *in-group affect*. Again, only the reciprocation of friendship group nominations was statistically significantly related to *in-group* affect (β =.51, p<.001; gender β =-.10, p=.10; perceived popularity β =.01, p=.78). Unlike the other two dimensions of social identification, the overall regression model was not statistically significant for *centrality* [F(3, 434)=1.14, p=.33; $R^2 = .00$]; none of the predictors was statistically significantly related to *centrality*.

Social Identification as a Moderator between Friendship Group Norms and Children's Intent to Conform to the Norms

Are children who more strongly identify with their friendship group also more likely to conform to the friendship group norms, as compared to those who less strongly identify with

their friendship group? To address this question, hierarchical multiple regression analyses were conducted, with intent to conform to each friendship group norm (i.e., self-reported intent to conform to friendship group norms in the domains of *academic activity*, *trends*, and *misbehavior*) serving as the dependent variable. For each dependent variable, three dimensions of social identification (i.e., *in-group ties*, *in-group affect*, and *centrality*) were entered in separate regression equations in order to test the differential moderating effect of each of the three dimensions of social identification.

In the first step of each hierarchical regression, gender (male=0 and female=1) and each of the friendship group norms was entered. In the second step, each dimension of social identification was entered separately to examine its effect on the outcome variable, after controlling for the effects of gender and the specific friendship group norm. In the final step, the interaction between each dimension of social identification and each friendship group norm was entered, in order to examine the moderating effect of social identification on the relation between the friendship group norm and children's intent to conform to hypothetical changes taking place with regard to that norm. To test the interaction effect, deviation scores (i.e., the sample mean subtracted from the raw scores) of the predictor variables were used (Aiken & West, 1991).

The descriptive statistics of study variables, including means, standard deviations, and intercorrelations are presented in Table 1. The results of the hierarchical multiple regression analyses are presented in Table 2, including standardized regression coefficients, the change of variance at each step, and the total variance explained. The β coefficients reported are from the final step with all predictors having been entered. Only interaction effects significant at a .05 level were shown in corresponding figures.

Intent to conform to academic norms. The main effects of gender and the friendship group's academic norms were significant predictors of children's self-reported intent to conform to changing academic group norms. Specifically, girls reported greater intent to conform to academic norms than did boys, and children who perceived higher levels of academic norms for their friendship group also reported greater intent to conform to the norms. The main effects of social identification in the second step were not statistically significant for any of the three dimensions of social identification. A marginally statistically significant interaction was found between *in-group affect* and friendship group academic norms: Children who perceived more positive affect toward their friendship group also reported greater intent to conform to the friendship group academic norms than did those who perceived less positive affect.

Intent to conform to trend norms. The main effect of friendship group trend norms was statistically significant. In other words, children who perceived their friendship group members as good at following the latest trends also reported stronger intent to conform to the norms. The gender effect on conformity to trend norms was marginally significant: Girls reported greater intent to conform to friendship group trend norms than did boys. In the second step, only ingroup ties had a marginally significant effect on conformity to trend norms. In the final step, significant interaction effects were found on the outcome variable between each of the three dimensions of the social identification and friendship group trend norms. As shown in Figure 1, the relationship between the friendship group trend norms and children's intent to conform to the norms was stronger when they perceived stronger in-group ties (i.e., connectedness), in-group affect (i.e., positive affect), and centrality (i.e., salience/ importance of group membership) toward their friendship group.

Intent to conform to friendship group misbehavior norms. A statistically significant main effect was found for friendship group misbehavior norms. That is, children who perceived their friendship group members as being highly involved in misbehavior also reported greater intent to conform to changes in those norms. The gender effect on children's conformity to friendship group misbehavior was marginally statistically significant: Boys reported greater intent to conform to misbehavior norms than did girls. In the second step, the main effect of social identification on children's conformity to misbehavior norms was statistically significant only for *centrality*. That is, children who perceived their friendship group membership to be more salient and important also reported greater intent to conform to join their friendship group members who cause trouble. In the final step, the interaction between friendship group misbehavior norms and social identification was statistically significant for *in-group affect* and marginally significant for *in-group ties*. As depicted in Figure 2, the relationship between friendship group misbehavior norms and children's intent to conform to changes in those norms was stronger for those who perceived higher levels of *in-group affect*.

Social Identification as a Moderator of Perceived Similarity between an Individual and His or

Her Friendship Group Members

Are children who more strongly identify with their friendship group also likely to perceive greater similarity between themselves and their friendship group members in corresponding domains of friendship group norms? The same analytic strategy of conducting hierarchical multiple regressions, explained in the prior section, was used to test this question. The three domains of friendship group norms, which were independent variables in the prior analysis, served as dependent variables. Gender (male=0 and female=1) and self-perceived functioning (i.e., within the domain corresponding to each of the friendship group norms) were entered in the

first step. In the second step, each dimension of social identification was entered in separate regression equations. The interaction between social identification and self-perceived functioning in each domain was entered in the final step. The means and standard deviations of self-perceived functioning for each domain were: *Academic* (M=3.94, SD=.83); *trend* (M=4.01, SD=.98); *misbehavior* (M=2.15, SD=1.13). Table 3 presents the results of the hierarchical multiple regression analyses, including standardized regression coefficients, the change of variance at each step, and total variance explained. The β coefficients are those from the final step with all predictors having been entered. Only interaction effects that were statistically significant at a .05 level were depicted in the figures below.

Academic norms. The gender effect was marginally significant: Girls reported higher levels of friendship group academic norms than did boys. The main effect of self-perceived academic functioning was significant. That is, children who perceived themselves as high on academic functioning also reported high academic norms for their friendship group, indicating perceived similarity between themselves and friendship group members in that domain. Each dimension of social identification was significantly related to friendship group academic norms. That is, children who had higher levels of social identification with their friendship group also perceived their friendship group members as better in academic functioning. A marginally significant interaction effect was found between in-group ties and self-perceived academic functioning, and a significant interaction effect was found between in-group affect and self academic functioning. As shown in Figure 3, children who reported more positive emotions toward their friendship group (i.e., high in-group affect) were found to perceive greater similarity between themselves and their friendship group members in academic functioning.

Trend norms. The main effect of gender was statistically significant: Girls reported higher levels of friendship group trend norms than did boys. The main effect of self-perceived functioning in following latest trend was also statistically significant, indicating children's perceived similarity between themselves and their friendship group members in that domain. In the second step, only in-group affect was related to friendship group trend norms at a marginally significant level. In the final step, significant interaction effects were found between two dimensions of social identification - in-group ties and in-group affect - and self-perceived functioning in following the latest trend. The interaction effect between centrality and self-perceived functioning in trend on friendship group trend norms was marginally significant. As shown in Figure 4, children who reported greater sense of connectedness and belongingness (i.e., high in-group affect) were found to perceive greater similarity between themselves and their friendship group members with regard to following the latest clothing and music trends.

Misbehavior norms. The main effect of gender was not statistically significant. That is, children's perceived level of friendship group misbehavior norms did not differ between girls and boys. The main effect of self-perceived misbehavior was significant, indicating children's perceived similarity between themselves and their friendship group members in involvement in misbehavior. In the second step, the main effect of social identification on friendship group misbehavior norms was significant for in-group ties and in-group affect. The main effect of centrality on friendship group misbehavior norms was marginally significant. It should be noted that the relationship was negative between social identification and friendship group misbehavior norms. In other words, children endorsed less involvement in misbehavior among their friendship group members with increasing levels of identification with their friendship group. In

the final step, the interaction effect was significant between *in-group ties* and self-perceived involvement in misbehavior and marginally significant between *in-group affect* and self-perceived involvement in misbehavior. As shown in Figure 5, children perceived greater similarity between themselves and their friendship group members within the domain of misbehavior as they felt greater connectedness and belongingness (i.e., high *in-group ties*) to their friendship group.

Discussion

The overarching goal of this study was to gain insight into the process by which children are influenced by their peer group. Specifically, the current study used Social Identity Theory (Tajfel, 1978) to examine possible mechanisms by which children's involvement in a peer group contributes to changes in their behaviors and to perceptions. According to the social identification process, children might be more susceptible to their peer group influence when they strongly identify with the group. Also, given that the process of social identification is inherently subjective in nature, children's self-reported friendship group to which they perceive themselves to belong was the focus for this study, rather than peer-identified cliques. The moderating role of social identification was partly supported regarding (a) the relationship between children's friendship group norms and their intent to change their behaviors and conform to the norms and (b) the perceived similarity between children and their friendship group members in various domains of activity or behaviorally based norms.

Several findings should be noted regarding children's self-reported friendship groups. Gender and grade effects were found on the reported friendship group size. Female children listed more peers in their friendship group than did male children, whereas previous studies have demonstrated an opposite pattern of gender effects for peer-reported groups in which male

children tended to participate in bigger peer groups than did female children (see Gifford-Smith & Brownell, 2003; Kwon & Lease, 2007). Compared to third and fourth graders, fifth graders reported involvement in larger friendship groups. In a longitudinal study, children were found to extend the boundaries of their friendship networks as they grow older, although this was particularly true for children who had an above-average number of mutual friendships in the beginning of the study (Graham, Cohen, Zbikowski & Secrist, 1998). Alternatively, given that participating children were from rural areas where they have been together for a long time, children might have added new children to their circle of friends maintained from their previous classroom. Also, the rate of reciprocated friendship group nominations was higher for fifth grade children, as compared to third and fourth grade children. This might suggest that older children have more accurate social perceptions regarding their friendship group membership than do younger children. Although it was true for 4th grade children only, girls had a higher rate of reciprocated friendship group nominations than did boys, supporting the notion that girls are usually more socially advanced than boys.

The current study extended the examination of social identification process to naturally occurring, as opposed to experimentally derived, groups of children in the middle childhood stage of development. Children reported overall high levels of social identification with their friendship group, which is consistent with previous studies with adolescent populations (e.g., Kiesner et al., 2002; Tarrant et al., 2006). Unlike those previous studies, however, we considered social identification to be multidimensional, as demonstrated by Cameron (2004). Whereas adequate reliability coefficients were found for *in-group ties* and *in-group affect*, the reliability coefficient was low for *centrality*. To recap, *centrality* tapped into the cognitive salience and importance of children's friendship group membership. The low reliability of this subscale might

be attributed to different factors. For example, as compared to items that measure the other two dimensions, items that measure *centrality* might tap into a more abstract construct, which could have contributed to children's inconsistent responses to these items. Also, two of the four *centrality* items were stated negatively, and some children were observed to have difficulty responding to those items. However, elimination of those items did not enhance the reliability of the scale.

We examined gender, perceived popularity, and reciprocated friendship group nominations as predictors of children's social identification with their friendship group. As hypothesized, reciprocated friendship group nominations were positively related to two aspects of social identification: *In-group ties* and *in-group affect*. That is, children who have a high consensus on their friendship group membership also reported feeling a greater sense of connectedness and belongingness to their friendship group (i.e., high *in-group ties*) as well as more positive emotions toward their friendship group (i.e., high *in-group affect*). In contrast, gender and social status indicators were not found to be related to any aspect of social identification for children in the current study, even though those variables have been found in past studies to be related to social identification among adolescents (Kiesner et al., 2002; Tarrent et al., 2006). Studies that span developmental stages are necessary to better understand the contribution of gender and different social status indicators on an individual's social identification over development.

The current study examined factors, including gender, friendship group norms, and social identification, that might affect children's intent to change their behaviors and conform to friendship group norms. Results of this study indicated that both individual and group characteristics are related to children's intent to change their behaviors and conform to different friendship group norms. Regardless of the domain of norms, children reported greater intent to

conform to a particular friendship group norm when they perceived more group involvement in that particular activity domain. However, it was also found that boys and girls differ in terms of their susceptibility to adherence to friendship group norms, depending on the activity domain. In general, girls reported greater intent to conform to *academic* and *trend* norms, whereas boys reported greater intent to conform to *misbehavior* norms. This implies that gender differences need to be considered to understand children's peer group influence as well as to develop appropriately sensitive interventions. The main effect of social identification on children's conformity to friendship group norms was minimal across the three facets of social identification, suggesting that children's social identification with their friendship group does not directly affect their conformity to friendship group norms.

Instead, the degree of children's social identification moderated the relationship between the level of perceived friendship group norms and children's intent to conform to the norms. The social identification process suggests that group norms influence individuals in the group because group norms are "prescriptive, not merely descriptive" (Hogg, Abrams, Otten & Hinkle, 2004, p. 259). In other words, group norms not only describe the characteristics of group members but also control and direct members' behaviors so that they behave consistently with the norms (Turner, 1991).

The results of this study support the conjecture that the regulatory function of children's friendship group norms is greater when children strongly identify with their friendship group. Specifically, the moderating effect of social identification between friendship group norms and children's intent to conform to the norms was supported for *trend* and *misbehavior* norms but not for *academic* norms. The moderating effect was evident for all three dimensions of social identification for *trend* norms. That is, children expressed greater intent to change their behaviors

and follow their friendship group's trend norms when they perceived greater sense of belongingness to their friendship group (high *in-group ties*), felt more positive emotions toward their friendship group (high *in-group affect*), and indicated that membership in their friendship group was highly salient and important (high *centrality*). Similarly, *in-group ties* and *in-group affect* moderated the relationship between children's perceived friendship group misbehavior norms and their intent to conform to the norms.

Research suggests varying explanations regarding the differential moderating effects of social identification on children's conformity across domains of activities. For example, studies have shown that peers and parents have differential influence on adolescents' attitudes or behavior:

Peers have been found to have greater influence on adolescents' drug use and clothing styles than parents, whereas the opposite pattern has been shown for educational aspirations (Brittain, 1964; Kandel, 1973). Moreover, Mounts and Steinberg (1995) have shown that parenting style moderates the impact of peer influence on adolescents' academic and achievement and drug use. However, stronger parental influence on academic behaviors over peer influence might not necessarily discount a peer effect, given that other studies have demonstrated that peer group has an impact on individuals' academic behaviors (e.g., Kindermann, 2007; Ryan, 2001). The absence of a moderating effect of social identification on children's conformity to friendship group academic norms in the current study appears to suggest that the social identification process is not an optimal explanatory process by which children are influenced by their friendship group.

The examination of the relationship between children's social identification and perceived friendship group norms revealed that children display positive perceptual biases toward their friendship group. Specifically, the more strongly children identified with their friendship group

(i.e., high *in-group ties*, *in-group affect*, and *centrality*), the higher they rated their friendship group members on a positive characteristic (i.e., academic norms) but low on a negative characteristic (i.e., misbehavior norms). This, in fact, appears consistent with the social identity theory which suggests that people are motivated to evaluate their group positively as a means to enhance their self-esteem (Hogg et al., 2004). Consistently, a positive relationship has been found between adolescents' peer group identification and self-esteem (Tarrant et al., 2006). In a similar vein, children might experience self-enhancement by perceiving their own friendship group members favorably as suggested by the current study.

The current study employed social psychological theories to explain the similarity between children and their friendship group members. According to self-categorization theory (Turner, Hogg, Oakes & Reicher, 1987), individuals' memberships in social groups affect their perceptions in a manner that they tend to perceive themselves and their group members interchangeably (i.e., similarity). Supporting this similarity hypothesis, significant and positive relations were found between children's self-perceived functioning in academic, trend, and misbehavior and their friendship group norms in corresponding domains. Further, the results of the current study demonstrated that the social identification process moderates children's perceived similarity between themselves and their friendship group members: Children were found to perceive greater similarity between themselves and their friendship group members across domains of behaviors (i.e., academic, trend, misbehavior) as they felt greater belongingness to their friendship group (i.e., high in-group ties) and felt more positively toward their friendship group (i.e., high *in-group affect*). It might be that the self-categorization process is more likely to occur when children also strongly identify with their friendship group. Alternatively, we speculated that the tendency for children who strongly identify with their

friendship group to report greater intent to change behaviors and conform to friendship group norms might lead them to perceive greater similarity between themselves and their friendship group members. However, this explanation does not seem to be applicable, at least, to the *academic* domain, given that social identification did not have an effect on the relationship between friendship group academic norms and children's conformity.

Several limitations of this study and future directions for research should be noted. First of all, the majority of measures used in this study were based on self-report. Self-report was considered to be appropriate to measure the core study construct of a child's social identification with his or her friendship group, given that social identification is defined as part of an individual's self-concept that derives from his or her group membership (Tajfel, 1978). However, future studies might also employ direct measures or use different informants to measure children's friendship group norms. For example, standardized test scores might be used to measure friendship group academic norms, and teacher or parent reports might be used to measure adherence to trend and misbehavior norms.

Second, whereas the three dimensionality of social identification has been supported among adult populations (Cameron, 2004), the evidence of dimensionality and validity of social identification is limited among children and adolescents. On the other hand, this study provided some evidence of multidimensionality of social identification among children given that the moderating effect varied across the three dimensions. Overall, the moderating effect was more substantial for *in-group ties* and *in-group affect* than for *centrality*, which might suggest that feelings and emotional aspects of social identification (i.e., *in-group ties*, *in-group affect*) might be more relevant than the cognitive aspect of social identification (i.e., *centrality*) for children. However, the poor reliability of the *centrality* subscale makes it difficult to interpret the results.

Thus, further studies are needed to examine whether a more valid measure of social identification can be constructed for children or whether the *centrality* construct is even appropriate to assess with children.

Despite the limitations, the current study is believed to advance our understanding of the mechanism underlying peer group influence by demonstrating that social identification could be one possible process by which children's friendship group exerts influence on their peer-related behaviors and perceptions.

References

- Agnew, R. (1991). The interactive effects of peer variables on delinquency. *Criminology*, 29, 47-72.
- Aiken, L. S. & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bandura, A. (1977). Social learning theory. Oxford, England: Prentice-Hall.
- Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development*, *53*(6), 1447-1460.
- Berndt, T. J. (1996). Transitions in friendship and friends' influence. In J. A. Graber, J. Brooks-Gunn, & A. C. Petersen (Eds.), *Transitions through adolescence: Interpersonal domains and context* (pp. 57-84). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Berndt, T. J. (1999). Friends' influence on students' adjustment to school. *Educational Psychologist*, *34*(1), 15-28.
- Berndt, T. J., Hawkins, J. A. & Jiao, Z. (1999). Influences of friends and friendships on adjustment to junior high school. *Merrill-Palmer Quarterly*, 45(1), 13-41.

- Brittain, C. V. (1963). Adolescent choices and parent-peer crosspressures. *American Sociological Review*, 28, 385-391.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Mass.: Harvard University Press.
- Brown, R., Condor, S., Mathews, A., Wade, G. & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology*, *59*, 273-286.
- Brown, B. B., Eicher, S. A. & Petrie, S. (1986). The importance of peer group ("crowd") affiliation in adolescence. *Journal of Adolescence*, *9*, 73-96.
- Brown, B. B. & Lohr, M. J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. *Journal of Personality & Social Psychology*, *52*(1), 47-55.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S. D. & Gariépy, J. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology*, 24(6), 815-823.
- Cairns, R. B., Perrin, J. E. & Cairns, B. D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence*, *5*(3), 339-355.
- Cairns, R., Xie, H. & Leung, M.-C. (1998). The popularity of friendship and the neglect of social networks: Toward a new balance. In W. M. Bukowski & A. H. Cillessen (Eds.), Sociometry then and now: Building on six decades of measuring children's experiences with the peer group. (pp. 25-53): Jossey-Bass.
- Cameron, J. E. (2004). A three-factor model of social identity. Self and Identity, 3, 239-262.

- Card, N. A., Hodges, E. V. E., Little, T. D. & Hawley, P. H. (2005). Gender effects in peer nominations for aggression and social status. *International Journal of Behavioral Development*, 29(2), 146-155.
- Crockett, L., Losoff, M. & Petersen, A. C. (1984). Perceptions of the peer group and friendship in early adolescence. *Journal of Early Adolescence*, 4(2), 155-181.
- Ennett, S. T. & Bauman, K. E. (1994). The contribution of influence and selection to adolescent peer group homogeneity: The case of adolescent cigarette smoking. *Journal of Personality and Social Psychology*, 67(4), 653-663.
- Gifford-Smith, M. E. & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, *41*(4), 235-284.
- Graham, J. A., Cohen, R., Zbikowski, S. M. & Secrist, M. E. (1998). A longitudinal investigation of race and sex as factors in children's classroom friendship choices. *Child Study Journal*, 28, 245-265.
- Hallinan, M. T. (1981). Recent advances in sociometry. In S. R. Asher & J. M. Gottman (Eds.),The development of children's friendships (pp. 91-115). New York: CambridgeUniversity Press.
- Hartup, W. W. (1983). Peer groups. In Mussen, P. H. (ed.), *Handbook of Child Psychology:*Socialization, Personality and Social Development, Vol. 4 (4th ed.). New York: Wiley.
- Haynie, D. L. (2001). Delinquent peer revisited: Does network structure matter? *American Journal of Sociology*, 106(4), 1013-1057.
- Hogg, M. A., Abrams, D., Otten, S. & Hinkle, S. (2004). The social identity perspective: Intergroup relations, Self-conception, and small groups. *Small Group Research*, 35(3), 246-276.

- Kandel, D. B. (1973). Adolescent marijuana use: Role of parents and peers. *Science*, *181*, 1067-1069.
- Kiesner, J., Cadinu, M., Poulin, F. & Bucci, M. (2002). Group identification in early adolescence: Its relation with peer adjustment and its moderator effect on peer influence. *Child Development*, 73(1), 196-208.
- Kindermann, T. A. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. *Developmental Psychology*, *29*(6), 970-977.
- Kindermann, T. A. (1998). Children's development within peer groups: Using composite social maps to identify peer networks and to study their influences. In W. M. Bukowski & A. H. Cillessen (Eds.), *Sociometry then and now: Building on six decades of measuring children's experiences with the peer group.* (pp. 55-82): Jossey-Bass.
- Kindermann, T. A. (2007). Effects of naturally existing peer groups on changes in academic engagement in a cohort of sixth graders. *Child Development*, 78(4), 1186-1203.
- Kwon, K. & Lease, A. M. (2007). Clique membership and social adjustment in children's same-gender cliques: The contribution of the type of clique to children's self-reported adjustment. *Merrill-Palmer Quarterly*, 53(2), 216-242.
- Leung, M-C. (1996). Social networks and self enhancement in Chinese children: A comparison of self reports and peer reports of group membership, *Social Development*, *5*(2), 146-157.
- Luhtanen, R. & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18(3), 302-318.
- Mounts, N. S. & Steinberg, L. (1995). An ecological analysis of peer influence on adolescent grade point average and drug use. *Developmental Psychology*, 31(6), 915-922.
- Newcomb, T. M. (1950). Social psychology. Ft Worth, TX: Dryden Press.

- Parkhurst, J. T. & Hopmeyer, A. (1998). Sociometric popularity and peer-perceived popularity:

 Two distinct dimensions of peer status. *Journal of Early Adolescence*, *18*(2), 125-144.
- Ryan, A. M. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development*, 72(4), 1135-1150.
- Sherif, M. & Sherif, C. (1964). *Reference groups: Explorations into conformity and deviance of adolescents*. New York: Harper & Row.
- Sim, T. & Koh, S. (2003). Domain conceptualization of adolescent susceptibility to peer pressure. *Journal* of *Research* on *Adolescence*, 13(1), 58-80.
- Tajfel, H. (1978). Differentiation between social groups. London: Academic Press.
- Tajfel, H., Billig, M. G., Bundy, R. P. & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, 1(2), 149-178.
- Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S.Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations*. Chicago: Nelson Hall.
- Tarrant, M., MacKenzie, L. & Hewitt, L. (2006). A Friendship group identification, multidimensional self-concept, and experience of developmental tasks in adolescence. *Journal of Adolescence*, 29(4), 627-640.
- Terry, D. J. & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22(8), 776-793.
- Tremblay, R. E., Mâsse, L. C., Vitaro, F. & Dobkin, P. L. (1995). The impact of friends' deviant behavior on early onset of deliquency: Longitudinal data from 6 to 13 years of age.

 *Development and Psychopathology, 7(4), 649-667.

- Turner, J. C., Hogg, M. A., Oakes, M. A., Reicher, S. D. & Wetherell, M. S. (1987).

 *Rediscovering the social group: A self-categorization theory. Cambridge: Basil Blackwell.
- Turner, J. C. (1991). Social influence. Milton Keynes, England: Open University Press.
- Urberg, K, A., Değirmencioğlu, S. M., Tolson, J. M. & Halliday-Scher, K. (1995). The structure of adolescent peer networks. *Developmental Psychology*, *31*(4), 540-547.
- Urberg, K, A., Değirmencioğlu, S. M. & Pilgrim, C. (1997). Close friend and group influence on adolescent cigarette smoking and alcohol use. *Developmental Psychology*, *33*(5), 834-844.

Table 2-1. Intercorrelations between Study Variables, Means, and Standard Deviations

	1	2	3	4	5	9	7	8	6	10
1. Gender										
2. Ingroup ties	03									
3. Ingroup affect	80	.73**								
4. Centrality	80	.40**	.43**							
5. Group academic norms	80.	.22**	.21**	.14*						
6. Conformity to academic norms	.27**	.03	01	.03	.40**					
7. Group trend norms	.25**	.14**	.07	80.	.10*	.14**				
8. Conformity to trend norms	.21**	.14*	60.	.05	90.	.12*	.64**			
9. Group misbehavior norms	17**	05	08	03	43**	32**	.20**	.15**		
10. Conformity to misbehavior norms	18**	.05	.05	.07	29**	42*	.14*	.17**	**65.	
Mean	.52	4.10	4.32	3.50	2.96	3.36	2.75	2.99	1.69	1.62
Standard Deviation	.50	.73	29.	.72	09:	1.15	68.	1.35	.70	1.10

Table 2-2. Hierarchical Multiple Regression, with Gender, Friendship Group Norms, and Social Identification as Predictors of Children's Intent to Conform to Friendship Group Norms

		Confor	mity to		Confor	mity to	trend	Conformity to			
		academic norms			norms			misbehavior norms			
Step	Predictor	β	R ²	ΔR^2	β	R ²	ΔR^2	β	R ²	ΔR^2	
			Socia	ıl Identif	ication ((SI): In-gr	oup ties				
1	Gender	.23**			.07†			07 [†]			
	Norm ^a	.40**	.22		.61**	.42		.58**	.36		
2	SI	04	.22	.002	$.07^{\dagger}$.42	.003	.06	.37	.006*	
3	Norm ^a x SI	.05	.23	.003	.11**	.43	.012**	$.07^{\dagger}$.37	$.004^{\dagger}$	
				Social	Identific	eation (S	SI): In-gro	up affect			
1	Gender	.23**			.07 [†]			07 [†]			
	Norm ^a	.41**	.22		.62**	.42		.58**	.36		
2	SI	07	.23	$.006^{\dagger}$.06	.42	.003	.06	.37	.007*	
3	Norm ^a x SI	$.08^{\dagger}$.23	.005 [†]	.09*	.43	.007*	.09*	.38	.007*	
		Social Identification (SI): Cen						itrality			
1	Gender	.24**			.07 [†]			06		•	
	Norm ^a	.39**	.22		.62**	.42		.58**	.36		
2	SI	01	.22	.000	.01	.42	.000	.08*	.37	.007*	
3	Norm ^a x SI	.06	.23	.004	.08*	.42	.006*	.04	.37	.002	

Note. ^a Friendship group norms that correspond to each of the dependent variables. Standardized regression coefficients from the final model are reported.

[†]p<.10 *<.05 **<.01

Table 2-3. Hierarchical Multiple Regression with Gender, Self-perceived Functioning, and Social Identification as Predictors of Friendship Group Norms

		Friends	hip gr	oup	Friendship group			Friendship group			
		academ	academic norms			trend norms			misbehavior norms		
Step	o Predictor	β	R ²	ΔR^2	β	R ²	ΔR^2	β	R ²	ΔR^2	
				Social	Identifica	ation (SI): In-gr	oup ties			
1	Gender	.07			.20**			05			
	Self-functioning ^a	.25**	.08		.52**	.32		.51**	.28		
2	SI	.19**	.11	.031**	.06	.32	.003	09*	.28	.005 [†]	
3	Self-functioning ^a x SI	$.08^{\dagger}$.12	$.006^{\dagger}$.11**	.33	.011**	.09*	.29	.007*	
				Social Id	dentificat	ion (S	I): In-gro	up affect			
1	Gender	.08 [†]			.21**			06			
	Self-functioning ^a	.26**	.08		.52**	.32		.51**	.28		
2	SI	.18**	.12	.036**	$.07^{\dagger}$.32	.003	11**	.29	.012**	
3	Self-functioning ^a x SI	.11*	.13	.011*	.14**	.34	.020**	.07 [†]	.30	.005 [†]	
	Socia			Socia	l Identification (SI): Centrality						
1	Gender	.08 [†]			.20**			05			
	Self-functioning ^a	.26**	.08		.51**	.32		.52**	.28		
2	SI	.13**	.10	.017**	.04	.32	.003	08^{\dagger}	.28	$.005^{\dagger}$	
3	Self-functioning ^a x SI	.07	.10	.005	$.08^{\dagger}$.33	$.006^{\dagger}$.02	.29	.001	

Note. ^a Self-functioning that corresponds to each of the dependent variables. Standardized regression coefficients from the final model are reported.

[†]p<.10 *<.05 **<.01

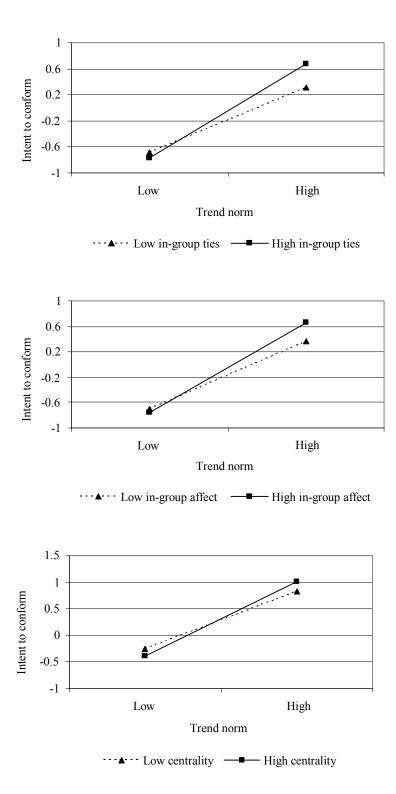


Figure 2-1. Moderating effect of social identification on perceived friendship group trend norms and children's intent to conform to the norms

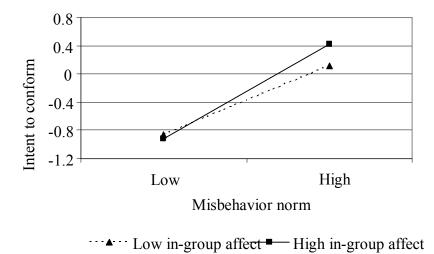


Figure 2-2. Moderating effect of social identification on perceived friendship group misbehavior norms and children's intent to conform the norms

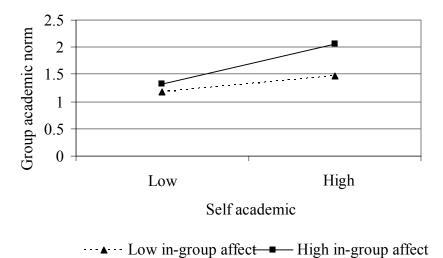
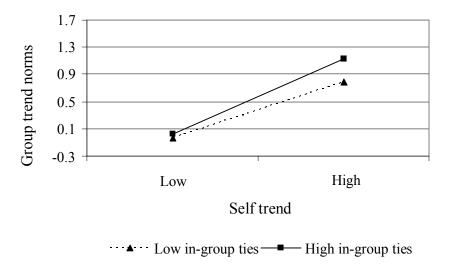


Figure 2-3. Moderating effect of social identification on children's own sense of academic functioning and friendship group academic norms



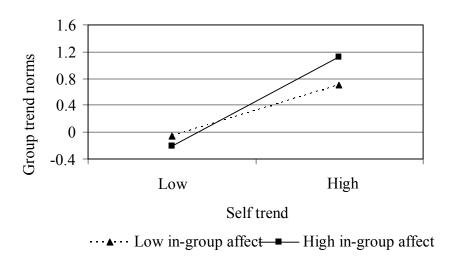


Figure 2-4. Moderating effect of social identification on children's own sense of following latest trend and friendship group trend norms

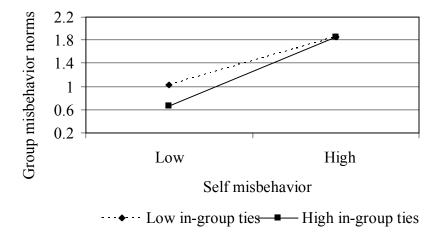


Figure 2-5. Moderating effect of social identification on children's own sense of misbehavior and friendship group misbehavior norms

CHAPTER 4

DISSERTATION CONCLUSION

Summary of Findings

The overarching goal of the two studies in this dissertation was to examine the effect of children's peer group context on peer-related perceptions and behaviors. Two different types of peer groups were examined: The clique (Study 1) and friendship group (Study 2). Cliques were identified based on peer-report of children's peer affiliation patterns (Cairns, Perrin & Cairns, 1985), whereas friendship groups were identified based on self-report of the group to which children perceive themselves to belong (Kiesner, Cadinu, Poulin & Bucci, 2002).

The first study examined the impact of children's clique membership on peer behavior nomination patterns. Specifically, we examined the proportion of cliquemates children nominated for a broad range of social and behavioral characteristics (e.g., prosocial, influence, cool, overt aggression, relational aggression, bully) as well as for social status indicators (e.g., like-most, like-least, most-popular, least-popular). It was found that children tend to nominate more cliquemates for positive characteristics (e.g., prosocial, cool) and high social status indicators (e.g., like-most, most-popular) than for negative characteristics (e.g., aggression, bully) and low social status indicators (e.g., like-least, least-popular). Also, gender and grade effects were found on the proportion cliquemate nominations: Boys nominated more cliquemates than did girls for *cool*, *overt aggression*, and *bully*. In contrast, girls nominated more cliquemates than did boys for relational aggression. In terms of grade effects, 4th grade children nominated more cliquemates for *prosocial*, *cool*, *like-most*, and *most-popular* than did 5th grade children. Third grade children also nominated more cliquemates for *most-popular* than did 5th grade children. In sum, the results imply that children's social network patterns, such as clique memberships, need to be considered when assessing social reputations and social status within the overall peer group (e.g., classroom, grade).

The second study examined the moderating effect of children's social identification with their friendship group regarding the relationship between (1) children's perceived friendship group norms and their intent to change their behaviors and conform to the norms and (2) children's own sense of functioning in various behaviors and friendship group norms in corresponding domains (i.e., perceived similarity between children and friendship group members). The social identification process suggests that children are likely more susceptible to peer group influence when they strongly identify with the group. Social identification was defined as having three dimensions: *in-group ties*, *in-group affect*, and *centrality* (Cameron, 2004).

First, we examined gender, perceived popularity, and the degree of reciprocation of friendship group nominations as predictors of different facets of social identification. Only the degree of reciprocation of friendship group nominations was positively related to *in-group ties* and *in-group affect*.

The results of the study partially supported the moderating effect of social identification.

Regarding the first research question, a stronger relationship was found between children's perceived friendship group *trend* and *misbehavior* norms and their intent to conform to those norms for those who reported high levels of social identification with their friendship group as compared to those who reported low levels of social identification.

Regarding the second research question, the relationship was stronger between children's own sense of functioning in the *academic*, *trend*, and *misbehavior* domains and perceived friendship group norms (in the corresponding domain) for those who reported high levels of social identification. The moderating effect was more substantial for the *in-group ties* and *in-group affect* dimensions of social identification than for *centrality*. Overall, the study was believed to advance our understanding of the mechanism underlying peer group influence by demonstrating

that social identification could be one possible process by which children's friendship group affects their peer-related perceptions and behaviors.

Future Directions

It was evident from the two studies that the context of the peer group contributes to various aspects of peer-related perceptions and behaviors. Different types of naturally occurring peer groups (i.e., clique and friendship group) were examined given that each type of peer group might provide a unique perspective on peer group influence. That is, peer group influence could come from both objectively identified peer groups (i.e., cliques) as well as subjectively identified peer groups (i.e., friendship group). Future studies need to further investigate the degree of structural overlaps between cliques and friendship groups. A structural comparison between the two types of peer groups might provide a more comprehensive picture of children's social network patterns. Also, a comparison of children's memberships in cliques and friendship groups might reveal the degree to which children's social perceptions are accurate. Moreover, children's social and emotional adjustment outcomes might differ between those who have an accurate peer group perception and those who do not.

Research has demonstrated that the peer group has a significant impact on various aspects of children's development; however, relatively little has been studied regarding the mechanism by which peer groups exert their influence. In the current dissertation research, the social identification process (Tajfel, 1978) was examined as one possible explanatory process by which children are influenced by their friendship group. Although the results of the second study warrant resolving some measurement issues of the social identity construct, the findings were fairly congruous with the theory. Application of other theories would broaden our understanding of how children are influenced by their peer group. For example, social network theory suggests

the importance of considering a child's location in the social network (e.g., liaison, group member, isolate) and his or her relationship to other group members to understand how information and group norms are transmitted through the system (Wasserman & Faust, 1994). That is, a child who is central in the network and well connected with others is likely to have greater influence over peers than are those who are marginal and loosely connected with others. Increased understanding of peer influence process is hoped to provide useful information in designing intervention programs to promote positive development and prevent negative behaviors for children and youth.

References

- Cairns, R. B., Perrin, J. E. & Cairns, B. D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence*, *5*(3), 339-355.
- Cameron, J. E. (2004). A three-factor model of social identity. Self and Identity, 3, 239-262.
- Kiesner, J., Cadinu, M., Poulin, F. & Bucci, M. (2002). Group identification in early adolescence: Its relation with peer adjustment and its moderator effect on peer influence. *Child Development*, 73(1), 196-208.
- Tajfel, H. (1978). Differentiation between social groups. London: Academic Press.
- Wasserman, S. & Faust, K. (1994). *Social Network Analysis: Methods and Applications*. New York: Cambridge University Press.