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# Peer Group Entry: A Focus On The Behavior And Gender Of The Entering Child And Group Members

Alvarez Teresita Borja

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**Peer Group Entry: A Focus on the Behavior and  
Gender of the Entering Child and Group Members**

by  
**Teresita Borja Alvarez**

Department of Psychology

Submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy

Faculty of Graduate Studies  
The University of Western Ontario  
London, Ontario  
July, 1989

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# Abstract

The ability to negotiate entry to a group of children has been recognized as an important social task for children. Current conceptual models of the group entry process identify characteristics of the entering child, such as behavioral skills, as importantly implicated in entry success. The contribution of the group members, and other context effects to entry success are not considered. Breaking from this tradition, the purpose of this investigation was to provide evidence in support of an ecological perspective of the group entry process. The focus was on the manner in which the characteristics of the entering children and group members such as their behavioral repertoire and gender combine with contextual factors such as the behavior and the gender of the co-participants to produce different outcomes.

A total of 322 seven- to nine-year-old children served as subjects. Ninety-two groups were observed, each formed by three relatively unfamiliar children. One child was designated as the entering child in each group, and was observed as she or he attempted to join two other children (the dyad members) who were playing a board game. Four experimental conditions were formed by crossing the gender of entering child with the gender of the dyad (i.e., girls and boys entered same- or opposite-sex groups). The behavior of the entering children and the group members was coded sequentially into several molecular (e.g., mimics, comparisons, helping) and molar (e.g., behavior related and unrelated to the group members' activity) categories. The group members' behavior was coded as positive and negative responses, ignoring, social initiations, and invitations.

The results indicate that entry processes which led to success were different for boys' and girls' entry into same- and opposite- sex dyads. Because the female dyads were substantially more socially receptive of the entering children than the male dyads, entering children needed only to respond to female dyad members' initiations to achieve entry success. Overall, the entering girls were more responsive to the social initiations of the dyad members than the entering boys, and thus, they also were more successful than

the entering boys in their attempts to enter female dyads. In contrast, during attempts to enter male dyads, successful children needed to first attract the social attention of the male dyads with attention-seeking entering strategies, and then respond to their social initiations. Since entering boys performed more attention-seeking entering strategies but were less responsive than the entering girls, they were not more successful than the entering girls in their attempts to enter male dyads.

The findings of the present study can be understood from an ecological perspective that stresses reciprocal influences between the entering children and the group members, and that considers the influence of both individual and contextual variables on the group entry process. Contrary to traditional conceptualizations of group entry processes, the success of group entry attempts is not attributable solely to individual dispositions of the entering child. Group members are important contributors to the group entry process.

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# Chapter One

## Introduction

### 1.1. Overview

Recently, a great deal of interest has been directed toward the study of children's interactions with peers. One area of inquiry that has received particular attention concerns the manner in which children attempt to gain entry into peer groups. Understanding the process by which children negotiate group entry is important for several reasons. First, children usually interact in groups, and once groups are formed, it is very difficult for outsiders to gain access to the already formed groups (Corsaro, 1979; 1981; Dodge, 1985; Dodge, McClaskey, & Feldman, 1985; Gottman & Parkhurst, 1980). Second, failure to gain entry into existing peer groups results in feelings of loneliness and social dissatisfaction (Asher, Hymel, & Renshaw, 1983), and decreased opportunities for learning important cognitive skills such as social conflict resolution and perspective taking (Piaget, 1932; 1951), and for the acquisition of new modes of behaviors and information about the behavior that is appropriate in different situations (Bandura, 1977). Further, children who are rejected by their peers have a greater chance of experiencing psycho-social and emotional problems later in life (Asher, Oden, & Gottman, 1977; Hartup, 1983; Parker & Asher, 1987).

Early attempts to assess the group entry process had a descriptive and normative purpose and focused on the behavior performed by children during their initial contacts with peer groups (Feldbaum, Christenson & O'Neal, 1980; McGrew, 1972). The findings of these studies suggest that children (hereafter referred to as the 'entering' children) who attempt to enter a group of peers generally behave in a shy and passive manner. In more recent studies, researchers not only have described the behavior performed by the entering children during their group entry attempts, but also the effectiveness of the behavior based on group members' responses to the entering strategies (Corsaro, 1979;

1981; Dodge, Schlundt, Schocken, & Delugah, 1983; Dodge Pettit, McClaskey, & Brown, 1986; Pettit, McClaskey, Brown, & Dodge, 1987; Putallaz & Gottman, 1981; Putallaz, 1983; Putallaz & Heflin, 1986; Putallaz & Wasserman, 1989). These studies suggest that the entering children's social skills influence the group entry process and indicate that the most effective entering strategy is to approach the peer group with behavior that is relevant to the group's ongoing interaction and to avoid aversive and disruptive behaviors.

Although the preliminary research on peer group entry has provided some useful information regarding the entry process, much information remains to be gathered. First, the extent to which characteristics of the entering children and group members such as their behavioral repertoire and gender influence the quality of interactions during entry episodes needs examination. In particular, the active contribution of the group members to the group entry process needs to be assessed (Corsaro, 1981; Hymel, Wagner, & Butler, in press). Second, the influence of contextual factors such as the behavior and the gender of the participants on the interactional process warrants investigation (Putallaz & Wasserman, 1989). Third, the effectiveness of children's entering strategies has been assessed mainly with respect to the quality of responses evoked by the strategies in the group members or by means of adult's or peer's subjective social competence judgments of the entering child (Dodge et al., 1983; 1986; Pettit et al., 1987; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Gottman, 1981). However, there is evidence that group members' responses to individual behavior of the entering child may not predict the eventual inclusion of the entering child in the group's ongoing activity (Corsaro, 1979). Thus, the relations between the entering children's behavior, the group members' responses, and entry success require further scrutiny.

In summary, past research has provided important information about the active contribution of the entering children to the group entry process. The focus has been on the behavioral strategies used by the entering children. The present study extended the

current knowledge in the area by assessing the active role of the group members in the group entry process, and the contributions of individual characteristics of the participants and contextual factors to the entry process and to entry success.

## **1.2. Conceptual Considerations**

### **1.2.1. An Ecological View of the Group Entry Process**

Researchers with an ecological orientation study simultaneously various psychological processes accounting for a particular phenomenon rather than focusing on single variables (e.g., Barker, 1978; Belsky, 1980; Bronfenbrenner, 1983; Lerner, 1983; 1987; Maccoby, 1983; Magnuson & Allen, 1983; Riegel, 1973). The goal is to understand how variables act together to "generate a sense of the whole and how subordinate activities fit into the total event." (Altman & Rogoff, 1987, pp. 35). An ecological perspective stresses the mutuality between environment and organism, and thus, reciprocity is a basic concept (Lombardo, 1987). For example, perceiver and objects are two different identities that in reality cannot be separated because they are in a functional dependency. There is no causality implied; perceptual activity and environment are not separated since they belong to a common ecosystem. Although perception is an active process of the individual, it is functionally related to the environment, and although the environment is not the organism, it is functionally related to the organism. The relation between experience and behavior is mediated by factors within the perceiver such as information-processing, motivational and value-related factors, selective attention, and response preferences (Wohlwill, 1983). However, these processes have developed and continue to be developed through organism-environment interactions.

From an ecological perspective, in order to understand the meaning of behavior, it is important to have information about the person and the environment. The definitions of environment and person are both broad. Environments have many dimensions and



properties. They can be defined broadly as everything that surrounds the person (Ittelson, 1973), as well as in functional terms, as all sources of stimulation that impinge on the individual and are relevant to the individual's behavior (Wohlwill, 1983). The context is defined as

the qualities of the physical and social environment that may be psychologically relevant, the nature of tasks and instructions, the flow of events, how the setting relates to other aspects of a person's life, the 'meaning' and interpretation of the situation by participants, and the familiarity of the participants with the setting (Altman & Rogoff, 1987, pp. 35).

The environment also includes cultural-historical information and the physical and psychological characteristics and behavior of the other persons in an interaction (Bronfenbrenner, 1983; Lerner, 1987). Information about the person includes personality characteristics, gender, age, attitudes, behavioral repertoire, social status, self perceptions, IQ, and so on. Knowing about the elements of the organism or the environment, however, is not enough. The actors and the context must be considered together to increase the power of predictions and to understand the processes that govern their transactions (Altman & Rogoff, 1987).

Although individual and contextual factors account for the processes occurring during children's group entry attempts (Allen, 1981; Berndt, 1983; Blyth, 1983; Dodge, 1985; Putallaz & Wasserman, 1989; Wright, Giammarino, & Parad, 1986), current models of entry success highlight the contributions of the behavior, personality, and cognitive dispositions of the entering child (Coie & Kuppertsmidt, 1983; Dodge et al., 1983; 1986; Putallaz & Heflin, 1986). A focus on the entering child to the neglect of the group members and the context of the interaction implies that (a) the behavior of the entering child is mostly a result of individual dispositions within the entering child and, (b) the group members are merely reactive to the entering child's behavior. From an ecological perspective, however, the behavior of the group members is not assumed to be merely reactive but a result of the dynamic interrelations among (a) the behavior of the entering child, (b) the context in which the behavior occurs and, (c) the manner in which the group members interpret the action, which in turn, depends to some extent on the

personal dispositions and situational conditions of the group members. For example, an aggressive behavior on the part of the entering child may or may not result in rejection by group members depending on whether the group members interpret the aggressive behavior as playful, attention-seeking, dominant, or assertive. How the group members interpret the aggressive act depends on the strength of the aggressive act, the context in which the behavior occurs (e.g., school, rough and tumble play, attack-defense, social status, age and gender of the aggressor and the victim) and the personal dispositions of the group members (e.g., past experience with similar aggressive acts, a disposition toward passive or active response to aggressive stimuli). Similarly, the behavior of the entering child is the result of the dynamic interrelations among the group members' behavior, the context, and the personal dispositions within the entering child. Thus, the outcome (e.g., group entry success, social status) is the result of a dynamic and reciprocal action-reaction process among all participants in an interaction and the context in which these processes occur.

The study of peer group entry is intrinsically dynamic in nature since the entering child and the group members are in a reciprocal relation. During peer group entry, the individual who attempts to enter the peer group begins the transaction with a set of personal dispositions (e.g., cognitive, emotional, behavioral repertoire, attitudes about the nature of the task and the nature of the group members). Similarly, the group members have a personal world that partially accounts for their own reactions to the newcomer. In addition, the entering individual and the group members are embedded in a context. The effective environment, that is, the part of the environment that influences the person, may be substantially different for the individual who attempts entry than for the group members. Indeed, the newcomer's physical characteristics and behavior, which constitute part of the context of the group members, are different from the group members' physical features and behavior, which constitute part of the context of the entering child. Thus, to understand the group entry process, it is necessary to assess the

processes occurring outside, within, and between the entering individual and the group members.

### **1.2.2. Rationale for the Selection of Variables**

Of course, all of the possible interactions that may occur among individuals and between individuals and their contexts cannot be examined in one study, and therefore, it is necessary to select some aspects of the person and the environment that may be significantly implicated in the phenomenon (i.e., the peer group entry process). There is evidence that a focus on the behavior and gender of the participants might be profitable for understanding some of the processes involved during children's group entry attempts (e.g., Corsaro, 1979; 1981; Dodge et al., 1986; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Wasserman, 1989).

The decision to focus on the entering children's behavior follows from past research which has provided consistent evidence regarding the role of entering strategies in the group entry process (e.g., Putallaz & Heflin, 1986). Less obvious is the fact that the behavior of an individual is a significant aspect of the context of the co-participant(s) in an interaction (Lerner, 1983; 1987). The behavior of the group members is part of the context of the entering child and the behavior of the entering child is part of the context of the group members. Thus, it makes sense to study the behavior of the entering child and the group members in relation to each other rather than in isolation.

The decision to focus on gender was based on evidence that gender can be both a potent individual and contextual variable affecting the group entry process. There is a general consensus that gender is a significant individual characteristic related to children's behavior, perceptions, and attitudes (e.g., Block, 1974; Doyle, 1985; Eagly, 1987; Hoffman, 1977; Jones, Farina, Hastorf, Markus, Miller, & Scott, 1984; Maccoby, 1989; Maccoby & Jacklin, 1974; Martin, 1989; Rushton, 1988). Young children have strong beliefs about the typical behavior of boys and girls (Martin, 1989; Spence, 1985) and often use gender to describe themselves (McGuire, McGuire, & Winton, 1979).

Spence (1985) goes as far as to suggest that gender is probably one of the most central organizing components of a person's self concept, perceptions, and actions. Furthermore, there is evidence that during social initiations, gender differences emerge in both the behavior of the entering children and the group members (Corsaro, 1981; Dodge et al., 1986; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Wasserman, 1989).

Gender also can be considered as a contextual variable. Maccoby and Jacklin (Jacklin & Maccoby, 1978; Maccoby, 1980; Maccoby & Jacklin, 1974; 1983) have stressed that an individual's gender constitutes a significant aspect of the context of the co-participant in an interaction. There is evidence that gender is a salient marker for peer selection in middle childhood (Hallinan, 1981; Hartup, 1983; Singleton & Asher, 1979). During social initiations, the gender of the entering child affects the behavior of the child(ren) being approached, and the gender of the group members affects the likelihood of a social initiation and the subsequent behavior of the entering child (Corsaro, 1981; Dodge et al., 1986; Phinney, 1979; Phinney & Rotheram, 1982).

Although I do not examine social cognitive and developmental factors in this study, these variables are related to children's behaviors during group entry attempts. Dodge et al. (1985) suggested that social competence (e.g., group entry success) requires sophisticated social cognitive information processing abilities. Entering children need to encode, interpret, and evaluate the social situation and the feedback they receive from group members. Similarly, Berger (1987) suggested that "to interact in a relatively smooth, coordinated, and understandable manner, one must be able both to predict how one's interaction partner is likely to behave, and, based on these predictions, to select from one's own repertoire those responses that will optimize outcomes in the encounter" (pp. 41). For children to be able to attend to all these social cues, and in particular, to be able to evaluate the impact of their behavior on the co-participant(s), perspective taking abilities must be well established (Selman, 1980). Thus, pre-operational children with their characteristic egocentric thought processes and limited ability to consider several

elements simultaneously are likely to rely on their own needs and behave in ways that disturb the group members. For example, during group entry attempts, pre-operational children might tend to interrupt the group members' ongoing activity and impose their behavior on the group members. With development, children become less self-centered and more accurate at taking the perspective of others (Selman, 1980). Thus, during group entry attempts, older children would be better at integrating and balancing their own needs, the needs of each individual group member, and the needs of the group as a whole than younger children. Indeed, there is evidence that during group entry attempts, older children perform fewer disruptive entering strategies and more behavior that centers on the group's ongoing activity than younger children (Corsaro, 1979; Putallaz & Wasserman, 1989).

In summary, an ecological approach offers an expanded perspective on group entry by considering the reciprocal influences between the entering children and the group members, and the manner in which individual characteristics interact with contextual factors to affect entry processes and outcomes. Of the many individual and contextual factors that influence the group entry process, the present study focused on the gender and behavior of both the entering children and group members.

### **1.3. Overview of Past Research on Children's Group Entry Attempts**

In this section, the literature pertinent to peer group entry is reviewed. Relevant studies describing the behavioral strategies used by children during their group entry attempts as well as the responses of group members to entering children are presented. Because most of these researchers have been guided by a social skills model, they generally have focused on the effect of the behavioral strategies performed by entering children on the group members' responses. In general, the findings indicate that there is a behavioral pattern that characterizes children's group entry attempts, and that group

members' responses to entering children as well as the eventual integration of entering children in the group's ongoing interaction can partly be accounted for by individual differences in entering children's behavioral styles.

Corsaro (1981) observed that group entry attempts commonly followed a pattern consisting of (a) a child's initial attempt to enter into a group, (b) rejection of that attempt by group members, (c) more attempts at entry, (d) more rejection, (e) eventual agreement by group members to accept the entering child, and (f) assignment of a role within the group to the entering child. These findings highlight the difficulty that children experience during group entry attempts, and explain the rather inhibited pattern of behaviors observed by McGrew (1972) and Feldbaum et al. (1980) in the initial social contacts of nursery school children with peers. These authors observed that newcomers were spatially isolated, off-task, inhibited, shy, and quiet. They passively observed their surroundings and the children in the group, and only gradually became active and verbal. A similar behavioral pattern was observed by Jormakka (1976) in the initial encounters between pairs of unacquainted 6- and 7-year-old children. Jormakka also observed that the initial inhibited behavior gradually changed with time to include a more active gathering of personal information.

In terms of the outcome of children's group entry attempts, the evidence suggests that children's entering strategies predict specific responses of group members as well as the inclusion of the entering child into the peer group. Corsaro (1979) observed group members' responses to the naturally-occurring group entry attempts of 2- to 4-year-old children in a nursery school, and related these responses to the eventual success of the group entry attempts. Corsaro found that entering children's non-verbal joining-in (e.g., joining in the group activity without a verbal request) did not immediately result in group acceptance. However, when non-verbal joining in was followed by performance of a variation of the group members' behavior (e.g., playing with the sand while the group members constructed a sand castle), group acceptance was almost assured (90%).

Corsaro observed that children seldom used adult-like rituals such as direct requests for access, greetings, and questions to join groups in spite of the fact that these behaviors were responded to positively by group members. Corsaro also found that most group entry attempts (66%) were ignored by the group members, and that negative group responses to children's entry attempts were more common than positive group responses. However, eventual acceptance of the entering children into the group's ongoing activity was likely if children persisted in their entry attempts in spite of initial group resistance. The only exception to this rule was if entering children performed aversive behavior that disrupted the ongoing activity of the group members (e.g., taking a toy away). Noxious behavior resulted mainly in the child's permanent exclusion from the group.

A different approach to the study of group entry was taken by clinical researchers (Dodge et al. 1983; 1986; Gottman, 1977; Putallaz, 1983; Putallaz & Gottman, 1981). These researchers were concerned with the maladaptive behavior patterns of unpopular children, or children who are liked least by most peers within a given group. Their goal was to explain the factors accounting for group rejection in order to provide clinicians with applied information for social skills training programs. These researchers defined the effectiveness of behavior by contrasting the behavior of popular and unpopular children during group entry situations and recording group members' responses to individual behaviors of the entering children. In a small pilot study, Gottman (1977) observed that during group entry attempts, unpopular children performed a similar pattern of behavior to that described by McGrew (1972). Gottman used the term 'hovering' to describe the fearfulness and shyness reflected in the behavior of unpopular children. An important finding of the Gottman (1977) study, which has had a direct impact on current group entry research, is that a relation exists between the behavior of children during attempts to enter peer groups and their social status. This relation has been explored further in recent studies which are described in detail below because they served as the basis for current conceptualizations of the group entry process and for the present research.

Putallaz and Gottman (1981) observed 20 7-year-old children (12 boys and 8 girls) as they approached two familiar same-sex and same-age peers who were playing a board game. The two children in the group, hereafter referred to as dyad members, were either popular or unpopular children. The entering child's behavior was coded into the following categories: provision of information, statements about the self, demands for a response or attention, agreement with the dyad members, disagreement with the dyad members, statements of feelings, or requests for information. The dyadic response to individual behavior of the entering child was coded as accepting, rejecting, or ignoring. The researchers found that when attempting entry, popular children did not disrupt the dyad members' interaction and integrated slowly into the group activity by imitating the behavior of the group members. In contrast, unpopular children disagreed with the dyad members more frequently and performed a high proportion of attention-getting behavior, such as requesting the attention of the dyad members to themselves, questioning, and stating feelings and opinions. These behaviors were either ignored or responded to negatively by the dyad members.

In keeping with their clinical approach, the main interest of Putallaz and Gottman (1983) was to determine the effectiveness of children's entering strategies during attempts to enter peer groups by observing the behavior of popular and unpopular children. However, they were unable to achieve this goal because the children observed were familiar with each other and therefore, group members' responses to the children's entry attempts may have reflected a history of interactions between the children rather than the effectiveness of the behavior of the entering child. In a more controlled study, Putallaz (1983) observed 22 6-year-old boys' entry attempts into an unfamiliar dyad composed of one second- and one third-grade boy who were confederates of the experimenter. The purpose of this study was to predict the later popularity status of the entering children from their behavior during group entry attempts in which the entering child was given the opportunity to (a) help a dyad member to play a game; (b) respond to



a conflict between the dyad members; and (c) respond to not being invited by the dyad members to join in the game. The behaviors coded in this study were similar to those of Putallaz and Gottman (1981). In addition, Putallaz double coded the entering child's behavior as relevant, or irrelevant (i.e., related or unrelated to the group activity) or tangential (i.e., indirectly related to the group activity but not pertinent to it). The use of confederates in this study standardized the situation across entering children and provided the opportunity to observe the behavior of entering children during each of the three social situations. However, the use of confederates made it impossible to observe natural dyadic responses to the entering children's behavior.

Consistent with the findings of Putallaz and Gottman (1981), Putallaz (1983) found that children who in the future became unpopular, disagreed more with the dyad members, questioned the dyad members more frequently, and provided more statements about the self than did children who in the future became popular. She concluded that the important factor mediating the relation between behavior of entering children and their ultimate social status was the relevancy of the behavior they performed to the ongoing activity. She suggested that unpopular children divert the group members' attention from the ongoing activity rather than integrating themselves into the ongoing interaction. Putallaz argued that unpopular children do not understand the rules governing social situations and therefore, are unable to perform behavior that is relevant to these norms. In support of this explanation, Putallaz showed that unpopular children were less able than popular children to define the three different social situations presented by the dyad members (i.e., opportunity to help, to respond to a conflict between the dyad members, and not being invited by the dyad members to participate in the ongoing interaction).

Other researchers also were interested in the relation between popularity status and the behavior performed by children during group entry attempts. In the first of two studies, Dodge et al. (1983) observed 30 5-year-old children (the ratio of boys and girls was not reported), ten of whom were popular, ten rejected, and ten neglected (not liked or

disliked by most peers within a given group). These children were observed while they attempted entry into unfamiliar dyads composed of same-sex and same-age children of average social status. The behavior of the entering children was coded as waiting and hovering, attention getting, group-oriented, questioning, self-referencing, or disruptive (aversive to the dyad members). Dyadic response to individual behavior of the entering child was coded as positive, negative, or ignoring. In the second study reported by Dodge et al. (1983), the authors videotaped 8 one-hour sessions during which six groups composed of 8 initially unfamiliar 7-year-old boys interacted freely in a laboratory room. The purpose of this second study was to predict the sociometric status of the children from the behavior they performed during group entry attempts. Behaviors were classified using a similar coding system to that used in the first study, with the addition of a new category called mimicking (imitation of the group members' behavior) and the inclusion of questions under the group-oriented classification. In this second study the effect of the type of play activity and the number of group members to which the entry attempts were directed were not controlled, as was the case in the studies by Putallaz (1983), Putallaz and Gottman (1981), and Dodge et al. (1983, Study 1). Since children interacted freely, other interactions besides those occurring during group entry could have affected later sociometric status.

The findings of these two studies indicated that popular children and children who in the future became popular made more group-oriented statements, asked more questions, and were responded to more positively by group members than were unpopular children or those who became unpopular children. Dodge et al. (1983) also found that waiting and hovering behavior, where the entering children simply observed the dyad members, was often ignored, and that the behavioral sequence that most often led to successful entry began with waiting and hovering and was followed by either mimicking the group or making group-oriented statements. Based on these findings, Dodge et al. (1983), concluded that successful entry is likely to occur when entering children perform

group-oriented behavior and when children progress from low risk behavioral tactics such as waiting and hovering to high risk behavioral tactics such as group-oriented statements.

Dodge and his colleagues (Dodge et al., 1986) conducted two additional investigations to examine the relation between cognitive information-processing patterns, entering strategies, and peer and adult judgements of the social competence of the entering children. In the first study, 53 (23 boys and 20 girls) 5- to 8-year old popular and unpopular children's attempts to enter familiar dyads of average social status were observed. In the second study, they observed 79 (76% boys) highly aggressive-unpopular, non-aggressive, and average status children during attempts to enter an unfamiliar dyad composed of average status children who were playing a board game. Naturally-occurring group entry attempts in school settings also were assessed. The effectiveness of children's entering strategies was determined by adults' as well as the dyad members' positive or negative ratings of the entering children's performance during group entry attempts. The findings suggested that children judged positively by adults and group members performed fewer disruptive behaviors, complied with group members' demands, reciprocated group members' sociable behaviors, gave and requested more information, and made weaker demands than children judged negatively by adults and group members.

One aspect of the studies conducted by Dodge et al. (1986) that sharply contrasts with other past investigations is that these authors explored 'connectedness' and 'reciprocity'. Entering children's behaviors were 'connected' when the entering children responded appropriately to group members' questions or demands. The term 'reciprocity' was used when the entering children performed similar behavior to that of the group members (e.g., following sociable behaviors of the group members with similar sociable behaviors). Children judged positively by adults and peers responded more appropriately to group members' requests and more often reciprocated the behavior of the group

members. These behaviors were effective in both laboratory and naturalistic observations of group entry attempts.

In an effort to integrate past findings, Putallaz and Heflin (1986) developed a model of group entry success that suggested that children's inability to perform appropriately is a result of the entering children's basic misunderstanding of the rules governing social interactions and/or the entering children's inability to perform in ways that conform to these rules. They proposed that group acceptance results from entering children's ability to integrate their behavior with the group members' ongoing activity. To be accepted by the peer group, entering children have to be agreeable and positive in their interactions. However, although there is consistency across past studies with respect to the efficacy of pro-social and activity-related behaviors, Dodge et al. (1986) cautioned against generalizing these effects across social settings. Contextual factors such as physical proximity, familiarity among children, group size, and the activity in which group members are involved influence children's behaviors and group members' responses (Dodge, 1985; Dodge et al., 1983; 1986; Pettit et al., 1987; Putallaz & Gottman, 1981; Putallaz, 1983; Putallaz & Wasserman, 1989). Thus, more research is needed before generalized principles regarding competent behaviors can be stated.

Recently, efforts have been made to examine entering strategies in relation to the social context. Putallaz and Wasserman (1989) investigated how children's entering strategies and group members' responses interacted with entering children's social status, age, and gender, and with the size of the peer group. Naturally-occurring attempts to enter groups composed of one, two, three, and four or more children were observed. The sample consisted of first, third, and fifth graders (33 boys, 39 girls) of high, average, and low social status. Children's entering strategies were coded as 'hover' (i.e., entering child physically approaches the group but refrains from overt verbal or non-verbal attempts to join in), 'join in' (i.e., active attempt to engage in the group activity by mimicking, questioning, participating, or conversing with no attempt to redirect the

group's ongoing interaction), and 'redirect' (i.e., child attempts to enter the peer group but also tries to change the group's ongoing activity). Group members' responses to these strategies were coded as accept, reject, or ignore.

The findings indicated that social status was related to children's entering strategy use. Unpopular children were more likely than popular children to approach the peer group physically without an overt verbal or non-verbal behavioral attempt to join in. Other individual characteristics such as age and gender also accounted for children's behavioral choices during group entry attempts. Both younger children and boys attempted to redirect the group's ongoing activity more frequently than older children and girls, respectively. Contextual factors such as group size influenced not only entering strategies but the likelihood of social initiations. Entering children were more likely to attempt social initiations toward one other child or to groups composed of four or more children than to dyads or triads. Entering children's attempts to redirect the group's ongoing interaction occurred most frequently during one-on-one social initiations whereas hovering occurred most frequently during social initiations toward dyads or triads.

The findings of Putallaz and Wasserman (1989) also suggested that entering strategies influenced group members' responses. Consistent with past findings, group members ignored children who hovered and responded positively to children who joined in without attempting to redirect the group's ongoing activity. Somewhat inconsistent was the finding that entering children's attempts to redirect the group's ongoing interaction were responded to positively by the group members. However, when rejection did occur, it typically happened to a child who attempted to redirect the group's ongoing activity. Other characteristics of the entering children such as their gender, age, and social status also influenced the behavior of the group members toward them. Group members were more likely to reject and less likely to accept girls' group entry attempts than boys' group entry attempts. Younger children were more likely to be accepted than

ignored by the group members after attempt to redirect the group's ongoing activity whereas older children's attempts to redirect were equally often ignored or accepted by the group members. Popular children were more likely to be responded to positively and less likely to be ignored after attempts to redirect the group's ongoing interaction than unpopular children. Contextual factors such as group size also affected the behavior of the group members toward the entering child. Singletons and groups of four or more children were more receptive toward newcomers than dyads or triads. Dyads were most likely to ignore girls' entry attempts whereas triads were most likely to reject girls' entry attempts.

These findings led Putallaz and Wasserman (1989) to conclude that

Although behavioral differences in the entry strategies of high- and low-status children have consistently been found, *clearly social skill is not the sole determinant of entry success... the peer environment must be considered along with the target child's social skills, because the latter by itself would provide an incomplete account of the factors influencing peer acceptance* (Putallaz & Wasserman, 1989, pp. 297, italics added).

Thus, their conclusions are consistent with other researchers who have stress the need to assess the influence of individual and contextual factors on social status (Blyth, 1983; Cairns, 1983; Hymel & Rubin, 1985; Hymel et al., in press; Schneider & Byrne, 1985).

## 1.4. Purposes of the Study

The present study was designed to accomplish several purposes. The first general goal was to observe some individual and contextual factors that may be related to children's entering strategy use. Past evidence that gender differences emerge during children's social initiations (e.g., Phinney, 1979) suggests that gender differences may appear in the behavior performed by children during their attempts to enter peer groups. Also, research findings that the gender of the approached child(ren) influences the behavior of the approaching child (e.g., Phinney, 1979) suggest that the gender composition of the peer group may be an important context effect influencing children's entering strategies. In addition, past studies have provided substantial evidence that

during social interactions the behavior of individuals affect each other reciprocally (Bell, 1968; Gottman & Ringland, 1981; Kellermann, 1987). Therefore, the behavior of entering children also may be affected by the behavior of the group members. Thus, the first purpose of this study was to assess the relations among entering strategies, the gender of the entering children, and the gender and the behavior of the group members.

A second general goal of the present study was to assess the extent to which the group members' behavior was affected by their own individual characteristics and by contextual factors. There is some evidence that individual characteristics, such as the gender of the group members, and contextual factors, such as the gender of the entering children, affect group members' behavior (Corsaro, 1979; 1981; Putallaz & Wasserman, 1989). Also, there is substantial evidence that entering strategies influence group members' responses (e.g., Dodge et al., 1983; 1986; Putallaz & Gottman, 1981). Thus, the second purpose of this investigation was to assess the relations among group members' behavior, the gender of the group members, and the gender and the behavior of the entering children.

A third general goal of the present study was to assess some of the factors related to the actual integration of the entering children in the group's ongoing interaction. Entering strategies and group members' responses may not entirely predict entry success (Corsaro, 1979). Entry success also may be related to the gender of the entering children and the group members (Corsaro, 1979; 1981; Putallaz & Wasserman, 1989). Thus, the third purpose of this investigation was to assess the relations among entry success and the behavior and the gender of the entering children and the group members.

The remainder of this chapter summarizes evidence related to the study's hypotheses. In the first section, studies suggesting gender differences in and the influence of the gender and the behavior of the group members on children's entering strategies are summarized. The second section reviews studies pertinent to gender differences in group members' behaviors during group entry attempts, and relations

among group member's behavior, and the gender and the behavior of the entering children. In the third section, the evidence relating entry success to the behavior and the gender of entering children and group members is presented. The last section summarizes the hypotheses of this study.

## **1.5. Factors Related to Entering Children's Behavior**

### **1.5.1. Gender Differences**

Although differences in the frequency of social initiations made by boys and girls typically have not been found (Phinney, 1979), gender differences have been observed in the kind of groups approached as well as in the type of behaviors performed by boys and girls during social initiations toward one or more peers. Putallaz and Wasserman (1989) found that girls are more reluctant than boys to attempt social initiations toward children who are in a dyadic interaction. Perhaps, girls avoid dyads more than boys because girls' dyads are more likely to rebuff the social initiations of a third child than boys. This speculation is supported by evidence that girls prefer to be in pairs while boys prefer to be in large groups (Waldrop & Halverson, 1975). Dodge et al. (1986) found that during the naturally-occurring group entry attempts of 7- to 9-year old children, boys attempted to gain the attention of the group members more often, and made fewer group-centered statements than girls. Similarly, Putallaz and Wasserman (1989) observed that during group entry attempts, boys attempted to redirect the group's ongoing interaction more frequently than girls.

Observations of one-on-one social initiations also have revealed gender differences. Newcomb and Meister (1985) observed pairs of 8- and 9-year-old unfamiliar children during social initiations toward one other child. They found that boys greeted the group members and provided objective information about themselves, their abilities, and their families more than girls, whereas girls provided more subjective or feeling-oriented information than boys. Similarly, Jormakka (1976) observed that during the initial phase



of a social encounter between two acquainted and unacquainted 6- and 7-year-old children, boys' social initiations were directed toward gathering and providing information about the play activity while girls' social initiations were directed toward gathering and providing personal information. These findings are consistent with studies conducted with adults in which females attend more frequently than males to the stimulus persons than to the activity (Smye, Wine, & Moses, 1980; Wine, Moses, & Smye, 1980). Phinney (1979) also found significant gender differences in the behavior of 3- to 5-year-old children during one-on-one social initiations. Girls made more requests and asked more questions than boys, while boys made more statements, suggestions, and demands for attention than girls.

Findings of research on gender differences in peer interactions in other social situations support further the proposition that gender differences may emerge in the behavior of children during their attempts to access peer groups. For example, interactions among boys are more boisterous (DiPietro, 1981), more competitive (Berndt, 1981; Lever, 1976), and less stable and positive (Hagglund, 1986) than those among girls. Boys conform to peer pressure more than do girls (Bixentine, Decorte, & Bixentine, 1976; Perry & Bussey, 1984), and boys imitate other boys more than girls imitate other girls (Perry & Bussey, 1979; Simon, 1977). There also is evidence that girls make friends more easily than boys (Hagglund, 1986), and their friendships are more intense and intimate than those between boys (Sharabany, Gershoni, & Hoffman, 1981; Waldrop & Halverson, 1975). Krasnor (1982) found that across a wide range of social situations, boys initiated more assertive and antagonistic behaviors, while girls produced more suggestions and friendly behaviors. Krasnor (1982) also found that boys engaged in more attempts to stop the action of other children, while girls engaged in more attempts to elicit or give affection and information.

Studies of children's perceptions of boys and girls suggest that children associate girls with behavioral descriptors such as 'cooperates', 'shy', 'socially competent' while

boys are associated with descriptors such as 'domineering', 'fights' (Coie, Dodge, & Coppotelli, 1982; Wine et al., 1980). Reviews of the research on gender differences suggest that aggressive and disruptive behaviors indeed are more typical of boys than of girls, that females are more socially competent than boys, and that females tend to be more fearful, anxious, empathic, to conform more with social expectations, and to be less impulsive, active, competitive, and dominant than males (Block, 1976; Doyle, 1985; Eagly, 1987; Hoffman, 1977; Maccoby & Jacklin, 1974; Parke & Slaby, 1983; Rushton, 1988; Wine et al., 1980).

Thus, the evidence from past research suggests that gender differences would emerge in children's strategies for entering peer groups. It was expected that entering girls would wait and hover, question, perform more activity-unrelated behavior than boys, and would imitate and demand less, and perform fewer aversive and activity-related behavior than boys (Coie et al., 1982; Jormakka, 1976; Newcomb & Meister, 1985; Perry & Bussey, 1979; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Wasserman, 1989). These expectations are only tentative, however, since they were based on samples and social situations different from those in the present study. Gender differences in children's behavior may change across the developmental cycle and across social situations (Deaux & Major, 1987; Maccoby, 1980; Maccoby & Jacklin, 1974; 1983).

### **1.5.2. The Influence of the Gender of the Group Members on Children's Entering Strategies**

Phinney and Rotheram (1982) observed that during one-on-one social initiations between 3- to 5-year-old children, both boys and girls performed more aggressive behaviors when initiating social contacts with boys than with girls, and that challenges occurred more often in same-sex than in opposite-sex social initiations. Not only is children's behavior affected by the gender of the other participants in an interaction, but even the likelihood that social initiations occur is affected by the gender of the to-be-approached children. For example, Phinney (1979) found that 3- to 5-year-old

children's one-on-one social initiations to same-sex peers were more frequent (65%) than social initiations to opposite-sex peers (36%).

Indirect evidence further supports the proposition that children's entering strategies can be affected by the gender of the group members. Interactions among same-sex peers are more active (Jacklin & Maccoby, 1978), more stable (Gronlund, 1959), more cooperative, and more positive (Charlesworth & Hartup, 1967; Newcomb, Brady, & Hartup, 1979) than those among opposite-sex peers. Same-sex peers are more intimate from preschool age on, whereas opposite-sex intimacy develops gradually and only equals same-sex intimacy by early adolescence (Sharabany et al., 1981). Sgan and Pickert (1980) found that 5- and 6-year-old boys performed more assertive-demanding behaviors than girls and that these behaviors were directed primarily toward other boys.

Thus, the few studies that have observed children in mixed-sex groups suggest that entering children may tend to be more active during same-sex than opposite-sex group entry attempts. Entering children may demand, question, ask and provide information, and request participation more often during same-sex than opposite-sex group entry attempts.

### **1.5.3. The Effect of the Behavior of the Group Members on Entering Children's Behavior**

Although important partners in the interaction, few attempts have been made to assess the effect of the group members' behavior on children's entering strategies. The idea of bidirectional effects in social interactions, a phenomenon well established in other research realms (Bell, 1968; Brazelton, Koslowski, & Main, 1974; Gottman, 1979; Gottman & Ringland, 1981), has rarely been applied to the research on group entry.

Dodge et al. (1986) examined the predictability of entering children's behavior from the behavior of group members and observed that entering children's behavior was "connected" with group members' behavior. Entering children typically complied with group members' requests, and reciprocated both the pro-social and antisocial behavior of

the group members. For example, when the group members provided information, the entering children typically also provided information, and when the group members disagreed with the entering children, the entering children also tended to disagree with the group members.

Thus, the above findings point to an active contribution of the group members to the interactional process during children's group entry attempts. However, because of the limited information provided in previous work, it is difficult to predict the nature of the influence of group members' behaviors on children's entering strategies.

## **1.6. Factors Related to Group Members' Behavior**

### **1.6.1. Gender Differences**

Past findings of gender differences in children's social behavior suggest that groups composed of boys or girls may characteristically respond differently to children's group entry attempts. However, the data are not straightforward regarding the direction of the gender differences that may be expected. On the one hand, girls show more empathic responsiveness and are more friendly, sociable, and attentive to social stimuli than boys (Block, 1976; Doyle, 1985; Hoffman, 1977; Krasnor, 1982; Wine et al., 1980) suggesting that during entry attempts, female group members may respond more positively to the entering children and may be more socially interested in the entering children than male group members. On the other hand, girls prefer to be in pairs and boys prefer to be in large groups (Hagglund, 1986; Waldrop & Halverson, 1975). Consequently, female dyads may be less receptive to newcomers than male dyads.

Further complicating predictions of gender differences in group members' behavior are findings that factors such as the age and gender of the entering child and group size differentially affect male and female group member's responses to children's group entry attempts (Corsaro, 1981; Dodge et al., 1983; Phinney, 1979; Phinney & Rotheram, 1982; Thome, 1986). The present study contributed to the current knowledge in the area of

group entry by gathering additional information about gender differences in group members' behavior

### **1.6.2. The Effect of the Gender of the Entering Child on Group Members' Behavior**

Because contextual factors, such as the gender of the co-participants in an interaction, affect the nature of children's social interactions (Maccoby, 1980) it is possible that group members' behavior varies as a function of the gender of the entering child. Since most researchers in the area of group entry have observed social initiations toward same-sex peers, the effect of the gender of the entering child on group members' responses has not been tested extensively.

There is substantial evidence, however, that from an early age children generally prefer to interact with same-sex peers and that gender is one of the most common criterion for peer grouping in preadolescent children (Hallinan, 1981; Hartup, 1983; Singleton & Asher, 1979). These findings suggest that group members may respond to the social initiations made by same-sex peers more positively than to those made by opposite-sex children. Consistent with this speculation, Phinney (1979) observed that more cross-sex than same-sex one-on-one social initiations were ignored by peers. Corsaro (1981) also found that preschool-aged boys responded more positively to group entry attempts from same-sex than from opposite-sex children whereas female groups were equally responsive to entering boys and girls. A pattern opposite to this one was observed in elementary-school-aged children (Thome, 1986).

Thus, the evidence suggests that group members' responses are to some extent influenced by the gender of the entering children. Because of the mixed findings and the limited number of studies that have observed opposite-sex social initiations, it is difficult to predict the effect that the gender of entering children may have on group members' responses to the entering children.

### **1.6.3. The Effect of Children's Entering Strategies on Group Members' Behavior**

Most research in the area has focused on the effect of children's entering strategies on group members' responses. The findings of these studies are summarized briefly since the data were reviewed in detail in an earlier section. The evidence indicates that non-group-oriented behavior, such as statements about the self, is either ignored or responded to negatively by group members whereas group-oriented behavior is responded to positively by group members (Dodge et al., 1983; 1986; Putallaz & Gottman, 1981; Putallaz & Wasserman, 1989). Group members typically ignore entering children who wait and hover (Dodge et al., 1983; Putallaz & Wasserman, 1989). Dodge et al. (1986) also found that group members comply with entering children's requests and reciprocate both pro-social and antisocial behavior of the entering child. Entering children's behavioral strategies that follow a sequence from waiting to either mimicking the group members' behavior or making group-oriented statements are typically responded to positively by group members (Dodge et al., 1983).

Thus, there is consistent evidence that the responses of group members are influenced by children's entering strategies. Because the studies reviewed were similar in methodology to the present one, replications of past findings were expected. Because previous researchers have not observed group members' social initiations toward the entering children, it is difficult to predict the effect of entering strategies on group members' initiations.

## **1.7. Factors Related to Group Entry Success**

### **1.7.1. The Role of Children's Entering Strategies**

The task of identifying successful entering strategies has not proceeded in a straightforward manner. Four different approaches have been used in previous research to define entering children's behavior as effective. For three of these approaches, entry success (i.e., inclusion of the child in the group activity) is not used as the criterion by which behavioral effectiveness is judged. These approaches provide indirect assessments of the relation between children's entering strategies and entry success. In the first approach, the quality of group members' responses to the different behaviors performed by entering children is recorded (Dodge et al., 1983; Pettit et al., 1987; Putallaz & Gottman, 1981). Behavior that typically is followed by a positive response from the group members is assumed to lead to entry success, and thus is regarded as effective. However, the validity of this assumption has not been tested. By the same logic, behavior that typically is followed by a negative response from the group members is regarded as ineffective. In the second approach, entering strategies used by popular and unpopular children are compared, and behaviors performed by popular children are labelled as more effective than those performed by unpopular children (Dodge, 1988; Dodge et al., 1983; Putallaz, 1983; Putallaz & Gottman, 1981). The assumption underlying the latter approach is that popular and unpopular children characteristically perform competently and incompetently, respectively. In the third approach, behavioral effectiveness is measured by overall adult and/or peer judgments of entering children's effectiveness during group entry attempts (Dodge et al., 1986). Behaviors performed by children judged as successful are regarded as effective, whereas behaviors performed by children judged as unsuccessful are regarded as ineffective. In the fourth and most direct method of defining behavioral effectiveness, the behavioral strategies which explicitly lead to entry success (i.e., inclusion of the child in the group's ongoing interaction) or entry

failure (i.e., permanent exclusion of the child from the group's ongoing interaction) are identified and labelled as competent or incompetent (Corsaro, 1979).

Perhaps not surprisingly, research based on these disparate approaches has produced mixed findings. Corsaro (1979) found that the quality of group members' responses to the individual behaviors of the entering children may not be a good index of behavioral effectiveness. For example, adult-like behaviors such as greetings, questions, and direct requests for access generally are responded to positively by group members, yet do not necessarily result in entry success. More commonly used behaviors such as non-verbal joining in, and behavior that mirrors that of the group members, although not necessarily responded to positively by group members, do predict entry success.

Other problems are evident when judgements of behavioral effectiveness are based on the relative use of different behaviors by popular and unpopular children. For example, because during group entry attempts unpopular children perform more disagreeable, demanding, and non-group-oriented behaviors than popular children, these behaviors have been labelled as ineffective (Dodge et al., 1983; 1986; Putallaz & Gottman, 1981). However, Berndt (1983) observed that in the Putallaz and Gottman (1981) and the Dodge et al. (1983) studies, references to the self (i.e., activity-unrelated behaviors) were responded to positively by group members. But because self references were used primarily by unpopular children, these behaviors were regarded as incompetent. Moreover, observations of naturally-occurring group entry attempts in school settings reveal that group-oriented behavior is less effective than non-group-oriented behavior (Pettit et al., 1987; Phinney & Rotheram, 1982), and that entering children's attempts to redirect the group members' focus on the ongoing activity are typically responded to positively by group members (Putallaz & Wasserman, 1989). Furthermore, some studies have failed to observe differences between popular and unpopular children in the use of activity-unrelated and activity-related entering strategies (Putallaz & Wasserman, 1989).



The assumption that behavioral effectiveness during group entry attempts can be determined by the quality of group members' responses to the entering child and/or the differential usage of behavior by popular and unpopular children would be supported if researchers demonstrate first that behavior defined as 'competent' using this strategy is also responded to more positively than negatively by group members, regardless of the social status of the entering children. Even if this proves to be the case, the researcher would still have to demonstrate that positive responses by group members lead to eventual acceptance of the entering child (the integration of the entering children in the group activity), and negative group responses lead to eventual group rejection. These relations have not been supported. On the contrary, in the Putallaz and Gottman (1981) study, all popular and unpopular children gained entry into the group activity, despite the fact that more of the behavior of the unpopular than of the popular children was responded to negatively by group members. These findings support Corsaro's (1979) assertion that group members' positive and negative responses to individual behavior of the entering children cannot reliably predict entry success.

The usefulness of adult and/or peer judgements of entering children's performance during group entry attempts as indexes of behavioral effectiveness also is questionable. Dodge et al. (1986) found that entering children who were judged positively by the group members complied more with group members' requests, more often reciprocated pro-social behavior of group members, performed less disruptive and disagreeable behavior, and refrained more frequently from weak demands than children judged negatively by the group members. However, adults' and group members' judgements of the entering children may be affected by factors other than the behavior of the entering children (Dodge et al., 1986). Indeed, the race, gender, or physical attractiveness of the entering children might affect these judgments (Hallinan, 1981; Vaughn & Langlois, 1983). Therefore, the relation between peer and adult judgements of the entering children's performance during group entry attempts and children's entering strategies may not necessarily index the effectiveness of entering children's behavior.

In conclusion, the evidence is equivocal regarding a relation between children's entering strategies and the actual integration of the entering children in the group's ongoing interaction. If there is indeed a relation, then it would be expected that those entering strategies that have been labelled as socially competent (e.g., activity-related behaviors) and 'incompetent' (activity-unrelated and disagreeable behaviors) on the basis of group members' responses or/and adult's and peers' judgements of the social competence would predict group entry success and group entry failure, respectively.

### 1.7.2. The Role of the Group Members' Behaviors

Corsaro (1981) observed that group members frequently resisted children's entry attempts. Five types of group resistance were identified: (a) direct verbal rejection and orders to leave, (b) rejection with an explanation of arbitrary rules, (c) rejection on the grounds of ownership of the place or the objects, (d) rejection due to overcrowding, and (e) rejection due to denial of friendship. Corsaro argued that the high frequency with which groups resisted children's entry attempts suggested that group members need to protect their interaction from intruders because the interactions within the group are fragile and easily disrupted. Therefore, group members make decisions about accepting or rejecting children during entry attempts, not only on the basis of the behavior of the entering children but also on their own internal processes.

In spite of Corsaro's (1981) attention to the internal group processes that could account for the success of children's entry attempts, most researchers of peer group entry have given primary focus to the instrumental role of the entering child for entry success, and less attention has been paid to the group members' contribution to the outcome of the interaction. Dodge et al. (1986) observed that group members made more pro-social initiations and compliant responses to entering children who were subsequently judged positively by the group members. Also, group members were more disagreeable and disruptive toward entering children who were subsequently judged negatively by the group members.

In light of the evidence obtained by Corsaro (1981) that group members may be active decision makers, the role of the group members in determining entry success merits consideration. Group members' social attentiveness toward entering children likely predicts entry success.

### **1.7.3. The Relation Between Entry Success and the Gender of the Entering Child and Group Members**

Although researchers in the area of group entry have been aware of the possibility that non-behavioral variables may be related to the success of children's group entry attempts, rarely have these variables been assessed empirically. Duck (1977) proposed that superficial characteristics such as race, height, and clothing are related to children's social behaviors and social preferences, and therefore are important components of the acquaintanceship process. There is evidence that gender is strongly related to children's peer preferences (Allen, 1981; Hallinan, 1981), and thus, it is likely that the success of children's group entry attempts also may be related to the gender of the entering child and group members. Past findings that children tend to interact in same-sex groups (Hartup, 1983; Thome, 1986) suggest that same-sex group entry attempts may be more successful than opposite-sex group entry attempts. Indeed, studies that have observed nursery school children's one-on-one social initiations provide support for these speculations (Phinney, 1979; Phinney & Rotheram, 1982). Not totally consistent with these findings, however, Corsaro (1981) observed that same-sex group entry attempts were more successful than opposite-sex group entry attempts for boys but not for girls.

Gender differences in children's entering strategies or/and group members' receptiveness to newcomers may mediate the relation between gender and entry success. The evidence that females are more sociable and show more empathic responsiveness to others' needs (Block, 1976; Hoffman, 1977) raises the possibility that success may be more likely during entry attempts into female dyads than into male dyads. The evidence that boys are more disruptive and aggressive than girls (Block, 1976; Maccoby & Jacklin,

1974) combined with findings that disruptive entering strategies are incompetent during group entry attempts (Corsaro, 1979; Dodge et al., 1983; 1986; Putallaz & Gottman, 1981) suggest the possibility that entering boys may be less successful than entering girls.

The gender of the entering children, regardless of their entering strategies, also may instigate the group members to promptly accept entering children. This may occur because of gender stereotypes held by the group members (Martin, 1989) or due to a history of previous conflictful relations with members of the opposite-sex. The evidence that girls avoid interactions with boys because of their roughness (Maccoby, 1989) suggests that girls may be more likely to reject the entry attempts made by boys than by girls.

## **1.8. Overview of the Study**

Group entry episodes were observed as second- and third-grade children attempted to enter groups composed of either two same- or opposite-sex peers. The group members were actively involved in playing a board game when the entering children arrived. The observation room was arranged in such a way that the entering children were confined to enter the room and sit at the table where the two children were playing the game. This confinement increased the likelihood that children would attempt to join the game. The board game was such that if the entering children participated, the original players were affected only in that they had to wait for the new child's turns. Otherwise, the game could continue without a major disruption. The rules of the board game were very simple and could be learned easily after a short observation period and explanation. To avoid the possibility of strong positive or negative reactions among participating children and the effect of children's reputations, the participants were relatively unfamiliar with one another.

Second- and third- grade children were observed because at this age in particular gender differences emerge in several behavioral and personality domains (Maccoby,

1981), and gender is readily used for social categorization and group selection (Hartup, 1983; Martin, 1989). Also, the cognitive abilities of these children permit them to process, integrate, and evaluate the group entry situation, and to take the perspective of the other children (Piaget, 1952; Selman, 1980). Thus, their behavior likely reflects an understanding of the social rules governing children's group entry attempts. Another reason for observing second- and third-grade children was for comparison purposes since other researchers also have observed children in this age group (Dodge et al., 1983, Study 2; Putallaz & Gottman, 1981).

An entry episode was defined as the period between the moment the entering children arrived into the room where the game was in progress until the moment the entering children had their first turn, up to a maximum of 15 minutes. Children's attempts to enter were considered successful when the entering children had their first turn at the board game.

## 1.9. Hypotheses

There were three major hypotheses. First, it was expected that the gender of the entering child, the behavior of the dyad members toward the entering child, and the gender of the dyad members each would be significantly related to children's entering strategy use (See arrows A, B, and C in Figure 1-1). Second, it was expected that the gender of the group members, the behavior of the entering child, and the gender of the entering child each would relate to the group members' behavior (See arrows D, E, and F in Figure 1-1). Finally, it was expected that the gender of the entering child, the gender of the group members, the behavior of the entering child, and the behavior of the group members each would be related to entry success. (See arrows G, H, I, and J in Figure 1-1).

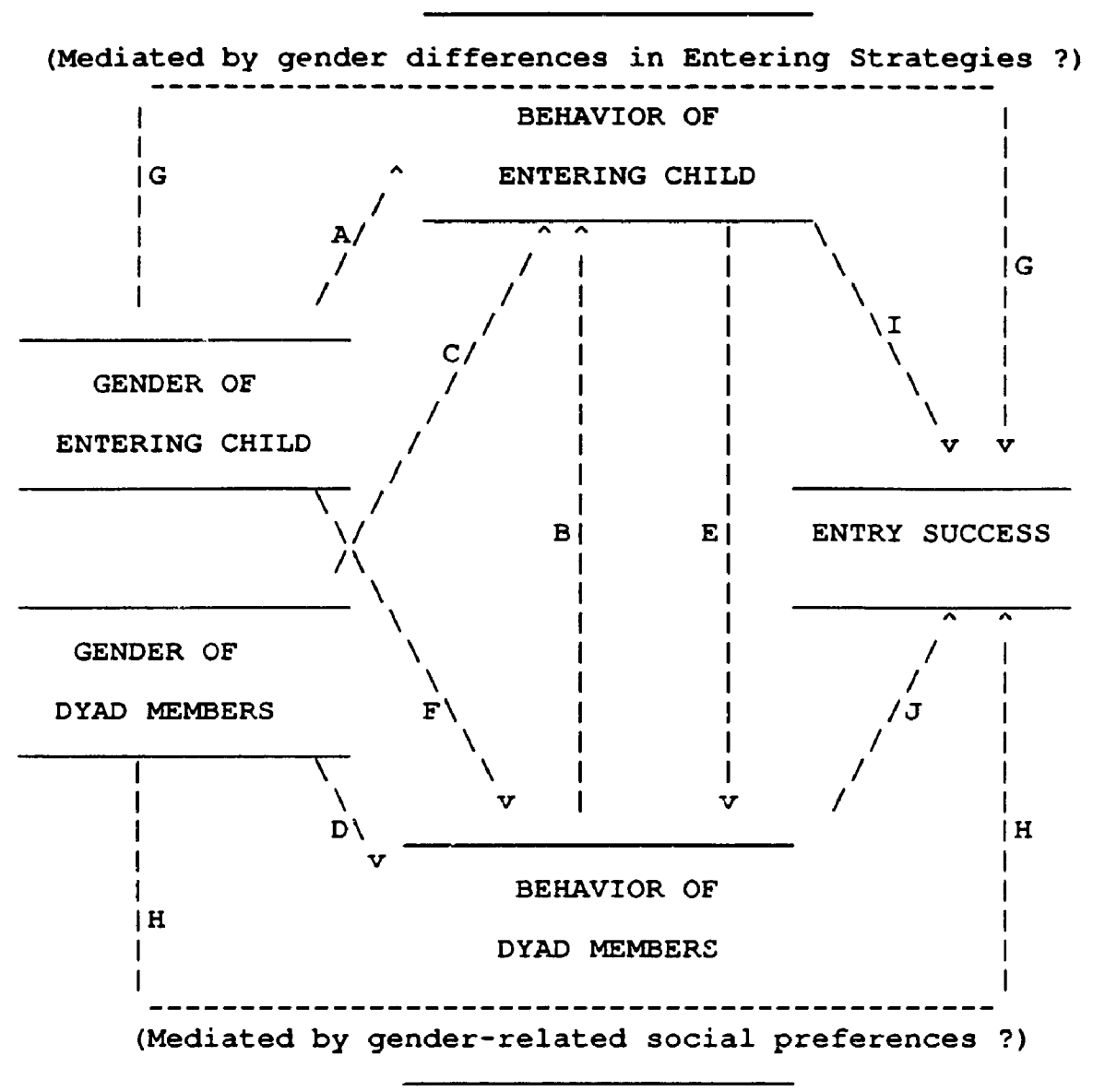


Figure 1-1: Hypotheses Regarding the Relation Among Variables

### **1.9.1. Hypothesis 1: Factors Related to Entering Children's Behavior**

The findings of studies that have observed gender differences during social initiations gave rise to predictions that entering girls would wait and question more, make more self references and perform more activity-unrelated behaviors, respond more positively to group members' initiations, imitate and demand less, and perform fewer activity-related behavior than entering boys (Dodge et al., 1986; Jormakka, 1976; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Wasserman, 1989). Some of these gender differences were expected to be qualified further by the gender of the group members. Entering boys were expected to be more demanding when they entered female dyads than when they entered male dyads, and entering girls were expected to wait more when they attempted entry into male dyads than when they attempted entry into female dyads (Jacklin & Maccoby, 1978; Phinney & Rotheram, 1982). In addition, since children prefer to be in same-sex peer groups (Hartup, 1983), it was expected that children would request participation in the board game more often during same- than opposite-sex group entry attempts. The gender of the group members also was expected to affect children's behavior in general. For example, more disruptive-aversive behavior was expected during children's attempts to enter into male dyads (Phinney & Rotheram, 1982). These expectations for gender differences in children's entering strategies and the effect of the gender of the group members on children's entering strategies are only tentative since they are based on studies which have observed social situations and children not necessarily comparable to those of the present study.

It also was expected that children's entering strategies would be affected by the behavior of group members. However, because of the limited data available, only minimal predictions could be made on the basis of past findings. From the information provided by Dodge et al. (1986), it was expected that entering children would be responsive to group members' initiations (Dodge et al., 1986).

### **1.9.2. Hypothesis 2: Factors Influencing Group Members' Behavior**

Gender differences were expected in the behavior performed by dyad members. It was difficult, however, to predict the specific behavior that would characterize male and female dyads due to mixed findings in previous research. Because females tend to be more sociable than males (Block, 1976), female dyads were expected to ignore the entering children less, respond more positively and less negatively to children's entry attempts, and initiate more interactions toward the entering children than male dyads (Krasnor, 1982). On the other hand, the evidence that girls prefer to be in pairs while boys prefer to be in large groups (Waldrop & Halverson, 1975) suggested that female dyads would be less positive and ignore the entering child more than male dyads.

It also was expected that the gender of the entering children would influence the group members' behavior. The evidence from studies that have observed same- and opposite-sex social initiations (Corsaro, 1981; Phinney, 1979; Phinney & Rotheram, 1982; Thome, 1986) combined with observations that children prefer to interact with same-sex peers (Hartup, 1983) suggested that in general dyad members would ignore less, respond more positively and less negatively, to initiate more interactions toward and invite same-sex entering children more often than opposite-sex entering children.

Predictions about the effect of the entering child's behavior on group members' responses were based on the results of past studies using similar methodological procedures as those of the present study (Dodge et al., 1983; Phinney & Rotheram, 1982; Putallaz & Gottman, 1981). It was expected that entering children who waited would be mostly ignored by dyad members. Entering children's activity-related behaviors, mimicking, help, and questions were expected to be mostly responded to positively by dyad members whereas disruptive and disagreeable behaviors were expected to be mostly responded to negatively by dyad members. No predictions were made regarding dyadic responses to entering children's self references because of the inconsistencies in past research findings with respect to these behaviors (Dodge et al., 1983; Putallaz &



Gottman, 1981; Phinney & Rotheram, 1982). Also, because of limited data, predictions were not made about the entering strategies that might facilitate dyadic initiations toward the entering children or dyadic invitations to the entering children to join in the game.

### **1.9.3. Hypothesis 3: Factors Related to Group Entry Success**

The data obtained from mostly indirect assessments of entry success suggested that entering children's disruptive-aversive and disagreeable behavior would be related to entry failure, and entering children's responses to dyadic initiations and activity-related behavior would be related to entry success (Corsaro, 1979; Dodge et al., 1983; 1986; Putallaz & Gottman, 1981). No specific expectations were made regarding activity-unrelated behavior because of the inconsistencies in past research findings (Phinney & Rotheram, 1982).

The few studies that have assessed the relation between group members' behavior and entry success gave rise to the predictions that dyadic social initiations and invitations toward the entering children would be related to entry success (Corsaro, 1981). Also, in keeping with Corsaro's (1979) findings, positive and negative responses of the group members to the entering children were not expected to be related to entry success.

It also was expected that entry success would be related to the gender of the entering child and the group members. However, the direction of effects was difficult to specify because of mixed findings. On the one hand, group entry attempts into female dyads may be less successful than attempts into male dyads because females prefer to be in a dyadic relation more than do boys (Waldrop & Halverson, 1975). On the other hand, entry attempts into female dyads may be more successful than entry attempts into male dyads because females tend to be more sociable and friendly than males (Block, 1976; Krasnor, 1982). Studies suggesting that children prefer to be in same-sex groups combined with actual data obtained from observations of nursery-school-aged children's one-on-one social initiations (Hartup, 1983; Phinney, 1979; Phinney & Rotheram, 1982) suggested that same-sex group entry attempts were likely to be more successful than opposite-sex

group entry attempts. However, the conflicting evidence weakens this expectation (Corsaro, 1981).

# Chapter Two

## Method

### 2.1. Subjects

The parents of second and third grade children were approached in 8 schools in London, Ontario. A total of 322 children (158 boys, 164 girls) received parental consent for the study (about 60% of the total sample approached). One hundred and eight groups composed of three children were formed (two children were included twice during pilot observations). Observations were conducted during the end of the winter and the spring. The age of the children at the time of testing ranged from 7 years 3 months to 9 years 4 months. The mean age was 8 years and 2 months at the time of the observation.<sup>1</sup> The majority of the children in the sample came from middle to middle-upper class families.<sup>2</sup> Sixteen of the groups were not used for data analysis (five groups were used for pilot testing and training, and 11 were discarded due to poor film quality). Of the 92 groups used for data analysis, 23 included only boys, 25 included only girls, 22 included two girls and one boy, and 22 included two boys and one girl. Thus, a total of 141 girls and 135 boys participated.

### 2.2. Setting and Materials

Observations of children's interactions were conducted in isolated rooms within each school. Although the rooms differed in size and surrounding materials across schools, arrangements were made to standardize the space as much as possible. The available space in the observation room was confined to a table and three chairs. The children had

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<sup>1</sup>Age was not a factor of investigation since no grade differences were expected; second and third graders were included to increase sample size while minimizing the number of schools that participated. Preliminary analysis indicated no significant effects of grade level.

<sup>2</sup>Parental consent was higher for children in schools located in more prosperous neighbourhoods of the city.

no room to do much more than sit at the table where the board game was placed. Indeed, in all cases, group members had been playing and continued to play the board game after the arrival of the entering children. The camera was positioned in one corner of the room with no camera-person behind it. The experimenter observed the children from outside the room via a monitor which was connected to the camera. In each room, there were many sources of stimuli other than the camera, all of which were kept away from the children (e.g., microcomputers, books, educational material), and thus, it was unlikely that the presence of the camera had a significant impact on the behavior of the children. Indeed, very few children wonder about the camera in the room, and when they did, they were unsure whether or not it was functioning.

The game consisted of two boards and a box of letters. One board had a spinning needle which could land on any of three categories: animals, jobs, or names. After the needle had landed, the children were to pick the letter from the box and say a word that started with that letter and that fit the given category (see also Putallaz & Gottman, 1981). If the child gave a correct answer, he or she rolled a die, and then moved a playing piece the corresponding number of spaces on a Parchisi board. The winner was the first child to arrive at a specified end point.

### 2.3. Procedure

All children were informed at the time the consent forms were distributed that the study involved a new board game and that the experimenter was interested in learning about how children played this game. No other details were given. Each of the 322 participating children was photographed and administered a private interview. To form groups of three children who were not overly familiar with one another, the following steps were taken. Children were shown the photographs of the other participating children in the same grade level within each school. The children were requested to indicate, using a 3-point scale, how often they played and fought with each photographed

child. Possible responses were 'a lot' (2 points), 'sometimes' (1 point), or 'never' (0 points). Using these responses, groups of three children were formed and consisted of children who, as much as was possible, were not highly familiar with each other (i.e., did not report having played or fought with each other 'a lot').

A computer program was developed to maximize the number of groups consisting of three children who rated each other as having played or fought 'never' or 'sometimes'. Once the groups of three children were formed, the selection of the children who would attempt entry and those who would form the dyad was determined in the following way. When the groups of three children were formed by two same-sex and one opposite-sex child, the latter child was selected as the entering children and the two remaining same-sex children composed the dyad. When the groups were formed by three same-sex children with two of them belonging to the same classroom and the third to a different classroom, the latter was selected as the entering child. When the groups were formed by three same-sex children, all of whom belonged to the same classroom, or when each belonged to a different classroom, the entering child was selected randomly.

The mean familiarity scores across the four gender conditions and across the groups composed of children who belonged to either one, two, or three different classes are presented in Table 2-1. The scores (one for 'play' and one for 'fight') describe the highest familiarity reported by either the entering child about each of the dyad members, each of the dyad members about the entering child, or the dyad members about each other. The decision to use the highest familiarity reported in each group instead of the mean familiarity score for each group was based on the fact that the information that was of interest was whether one or more of the children in each group were particularly acquainted with another child(ren) (i.e., had played or fought "a lot"). This information was lost if the familiarity score was calculated as a mean of the scores reported by the children in each group.

Table 2-1: Children's Mean Familiarity Scores

Groups	Familiarity Scores <sup>a</sup>			
	'Play'		'Fight'	
	Mean	SD	Mean	SD
All Boys	.80	.56	.73	.59
All Girls	1.14	.48	.48	.60
Boys entering female groups	.68	.71	.32	.65
Girls entering male groups	.67	.65	.58	.79
Same Classroom <sup>b</sup>	.62	.50	.23	.60
Two Classrooms	.88	.67	.59	.67
Three Classrooms	1.00	.53	.38	.52

Note. Range of possible scores is 0 to 2.

<sup>a</sup> Familiarity scores represent the highest familiarity rate mentioned by either the entering child about each of the dyad members, each of the dyad members about the entering child, or the dyad members about each other.

<sup>b</sup> Refers to groups formed by children belonging to either one, two, or three different classes.

To assess if there were significant differences in the familiarity reported by children across the four gender conditions, the familiarity scores for "play" and "fight" were used as the dependent variables in a two (gender of the entering child) by two (gender of the dyad members) MANOVA. The results indicated a non-significant multivariate effect for the gender of the entering child, the gender of the dyad members, or the interaction between these two variables on familiarity scores [Wilks' Lambda,  $F(2,65)=.64, 2.9, 2.0, p>0.05$ , respectively]. Thus, there were no systematic differences in familiarity across the four gender conditions.

To determine if there was a significant difference in the familiarity across groups composed of children who belonged either to one, two, or three different classes, a one way MANOVA with three levels (number of classes to which children in each group belonged to) was performed on the familiarity scores for "play" and "fight". The results indicated a non-significant multivariate effect for number of classrooms on familiarity scores [Wilks' Lambda,  $F(4,132) = 1.28, p>.05$ ]. Thus, there were no systematic differences in familiarity across the groups composed of children who belonged to either one, two, or three classrooms.

On the test day, children selected to compose the dyad were brought from their classrooms into the observation room, and instructed how to play the board game. After the dyad members played the game for five minutes, the entering children were brought from their classrooms, instructed to enter the room where the other children were playing, and requested to remain in the room until the experimenter returned for them. If the children asked questions, or came out of the room to ask something of the experimenter, they were told that their questions would be answered later on and to go back into the room. No further instructions were given. Each session lasted approximately fifteen minutes. At the end of each session, the children in groups in which the entering children did not gain entry were interviewed by the experimenter. First, the unsuccessful entering child was asked why he or she did not play the game. Then, the dyad members were

asked why they did not let the entering child play the game. After the children returned to their classrooms, the experimenter made notes of the responses given by the children. All of the sessions were videotaped for later coding.

### 2.3.1. Coding of Children's Behavior

Children's behavior was coded directly from videotapes of the entry episodes. A timer was superimposed on all the videotapes and was used to determine the time spent in waiting and the total duration of the entry episodes. When the videotape stopped, the clock also stopped. The coder entered the information directly onto a computer which contained a time program that could be stopped at will by the observer. The computer's timer was used only for determining the time children waited, although time information also could be obtained by looking at the videotape's superimposed timer.

Coding started from the moment the entering child opened the door of the room where the dyad members were playing the board game, and finished when the entering children had their first turn at the game. In those cases where the entering child did not play the game, coding continued until the end of the session (i.e., fifteen minutes after the entry episode began). To assure that the behavior coded for the entering children and the group members corresponded to the situation as originally designed, entering children's and group members' behavior was classified as 'other' if the group members left the table or performed out-of-context behavior such as extended periods of laughing, wandering, or dropping materials from the board game onto the floor. These behaviors, however, were almost never observed.

The behavior of the entering children was coded in terms of "units". A "unit" was defined as a behavior with a content that could be defined with the coding system developed (Bakeman & Gottman, 1986). Cases in which a child repeated consecutively the same behavioral unit or code (e.g., "I want the blue, want the blue, yes blue") were summarized as one unit.



The behavior of the entering children and the dyad members was coded sequentially. For each behavior of the entering child that was coded, the subsequent behavior of the dyad members also was coded. Then, the next behavior performed by the entering child was coded followed by the corresponding subsequent behavior of the dyad members. When the dyad members did not respond to the entering child, dyadic "ignoring" was recorded.

Three coding systems were developed for this investigation in part based on past research (Dodge et al., 1983; Putallaz & Gottman, 1983), and also with new codes (i.e., responses to group members' social initiations, helping, comparisons, requests for participation, and general statements) integrated after pilot observations were conducted. A detailed description and examples of each coding system is presented in Tables 2-2, 2-3, and 2-4, as well as in Appendices A and B.

One coding system (see Appendix A or Table 2-2) was used to classify entering children's behavior into thirteen mutually exclusive and exhaustive categories. This coding system was hierarchically organized; if a behavior was classified by a code earlier in the list, it could not be classified by a code later in the list, even if a later code also was applicable. Codes which classified the entering child's behavior in terms of its qualitative connotation (e.g., responses to dyadic initiations, aversive, mimick'ng, comparisons, helping) appeared earlier in the coding system whereas later codes concerned the manner in which a behavior was delivered (e.g., question, demand, statement). The assumption underlying this approach was that the qualitative value of a behavior performed by the entering child was likely to be more salient to the dyad members than the manner in which it was presented. For example, an aggressive statement was coded as an aversive behavior and not as a statement because a dyadic response to the aversive behavior was more likely to be in reference to the aversive content of the behavior than to the use of a statement by the entering child.

Table 2-2: Primary Coding System to Classify Behaviors of Entering Children

Code	Definition	Example
Aversive	Verbal or non-verbal behavior which is intended to disturb, interrupt, or aggress dyad members. Similar to the 'Disruption' code used by Dodge et al. (1983).	Hitting Insulting
Response	Responses were coded when the the entering children responded contingently to previous dyadic requests.	Dyad member says "Sit!" and child sits.
Mimics	Verbal and non-verbal behavior that echoes a behavior of the dyad. <u>Exception</u> : When the entering child repeats the same word or phrase but with a different connotation.	Dyad member says "Don't" and the entering child says "Don't".

(Table continues)

Code	Definition	Example
Comparisons	Verbal behavior that compares children or that requires comparisons among children.	"Who is winning?" "He'll win!" "She is winning"
Help	Verbal or non-verbal behavior that assists, aids, or supports a dyad member.	Rolling a die. Spinning for a dyad member.
Inclusion	Direct or indirect requests for participation in the game.	"Can I play?" Taking a turn. "My turn!" "I'll go first" "Am I suppose to play?"
Agree	Child agrees with what dyad members are doing or saying.	"That is right" "Yeah" "Good answer"
Disagree	Child disagrees with what dyad members are doing or saying.	"That is wrong" "Don't"

(Table continues)

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Code	Definition	Example
Self	Verbal behavior that attracts	"I'll go second"
Refer- ences	attention to the self or informs about wishes, feelings, or experiences. This code is similar to the "me" bids used by Dodge et al. (1983) and Putallaz and Gottman (1981).	"Look (at me)" "It is my turn", "My sister..." "I know one" "Me, too" "I like..."
Quest- ions	Statements in form of questions soliciting responses from dyad members. Similar to that used by Putallaz and Gottman (1981).	"What are you doing?" "Your name is Ed, right?"
Demands	Verbal or non-verbal non- aversive behavior that demands a behavior from or imposes a wish on dyad members. Similar to the Dodge et al. (1983) 'Attent- ion Getting' but only includes behavior which explicitly demands a behavior from the dyad members.	"Come on!" "Go!" "Don't!" "Pick it up" "Give me!"

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(Table continues)

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Code	Definition	Example
Statement	Statements other than those classifiable under the above codes and that are not a response to a request from a dyad member. It also includes exclamations and greetings.	"You missed it" "Your turn" "Nice game!" "The lady is watching us" "Again!"
Waiting	Periods of over three seconds when the child is quiet and attending to the dyad members, while dyad members are <u>not</u> directing their actions toward the entering child. Similar to Dodge et al. (1983) 'wait and hover' tactic.	
Other	Verbal or non-verbal behavior that is difficult to include in the above codes. Summarizes the behavior that occurs while children are out of the context of the board-game.	Wandering around. Laughing. Looking around.

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With these specifications in mind, the following thirteen codes were used to classify the behavior of the entering children. 'Aversive' behavior consisted of verbal or non-verbal behavior which injured or disturbed the dyad members (e.g., pushing, insulting, hitting, grabbing an object against the will of the group member). An entering child's 'response' was coded when the behavior of the entering children was a direct response to a previous question or command of the dyad members (e.g., the dyad members say "sit" and the entering child does so; the dyad members say "Do you know how to play?" and the entering child says "yes" or "no"). A 'mimic' was coded when the entering children echoed a behavior of the dyad members (e.g., a dyad member says "cat" and the entering child also says "cat"). A 'comparison' was coded when the entering child made statements or questions that required a comparison among children (e.g., "She is ahead of you", "Who is winning?"). 'Helping' was coded when the entering child, without imposing her or himself on the dyad members (i.e., demanding or insisting), assisted the dyad members in playing the board game (e.g., provided an answer for the game, moved the token around the game board, passed the box of letters to a dyad member, picked a letter for a dyad member). 'Inclusive' behavior was coded when the entering child directly or indirectly requested participation in the game (e.g., taking a turn, locating her or his token on the game board, "Can I play?"). 'Agreements' were coded when the entering child performed a behavior that indicated agreement with dyad members (e.g., "Yeah!", "good answer", "that's right"). 'Disagreements' were coded when the entering child indicated disagreement with dyad members (e.g., The dyad member says "Cat is an animal" and entering child says "I don't think so" or "That is not a good answer"). 'Self references' were coded when the entering child attempted to attract the attention of the group members to the self. Sentences typically included 'me', 'my', 'mine', or 'I' pronouns (e.g., "I like that game", "Look at me", "Is this chair mine?", "My brother knows you"). 'Questions' were coded when the entering child solicited a clarification from dyad members (e.g., "Where is the lady?", "What are you doing?").

**'Demands'** were coded when the entering children explicitly imposed a behavior on or demanded a behavior from dyad members (e.g., "Go!", "Let me see!", "Roll the die"). **'Statements'** consisted of general statements not classifiable by any of the other codes described above (e.g., "This is a nice game", "The lady is outside", "The room is big"). **'Waiting'** was the only code for which duration information was recorded and consisted of periods of over three seconds during which the entering children quietly observed the dyad members while the dyad members were not directing their behavior toward the entering children. When a previous dyadic request for action was followed by entering children's waiting (i.e., entering child did not respond but continued to observe the dyad members), this behavior of the entering child was coded as waiting. Similarly, when a previous dyadic request for action was followed by an independent behavior performed by the entering child (e.g., instead of responding to the previous dyadic request, the entering child questioned or demanded an action from dyad members), the behavior of the entering child was coded correspondingly (in the above example, as question or demand).

A second system was used to further qualify the behavior of the entering children (see Appendix A or Table 2-3). The verbal behavior of entering children, with the exception of responses to dyadic initiations, that was related to the group's ongoing activity was double-coded as **'activity-related'** (e.g., "Can I play?", "What are you doing?", "I have a game like that at home", "This is an interesting game"). Behavior which was not related to the group's ongoing activity was double-coded as **'activity-unrelated'** (e.g., "Where is the lady?", "My name is Bob", "Are you in Ms. Smith's class?", "Do you know Laura?").

A third coding system was used to classify the behavior of the dyad members which was directed toward the entering child into five exhaustive and mutually exclusive categories (see Appendix B or Table 2-4). The behavior of dyad members which was directed to one another was not coded. Following Putallaz' and Gottman's (1981)

**Table 2-3: Double Coding System for Entering Children's Behaviors**

Code	Definition	Example
Activity- Related	Verbal behavior which was related to the board game	"Can I play?" "Nice game" "You are ahead"
Activity- Unrelated	Verbal behavior which was not related to the board game.	"My name is Ed" "Nice room!"



Table 2-4: Coding System for Classifying Behaviors of the Dyad

Code	Definition	Example
Positive	Satisfactory replies to previous requests from the entering child. Positive comments about the child or the child's previous remark. Do not request an action from the entering child.	"Can I play?" followed by "yes" or "You are nice"
Negative	Unsatisfactory replies to a previous request from the entering child. Negative comments about the child or the child's previous remark. Should not request an action from the entering child.	"Can I play?" followed by "You are not smart", No!"
Ignore	No apparent verbal or non-verbal behavior directed toward the entering child.	

(Table continues)

Code	Definition	Example
Initiations	<p>Behavior directed toward the entering child that requests an action from the entering child. Initiations were double coded as 'invitations' when the dyad members' verbal or non-verbal initiation consisted of an invitation to the entering child to participate in the game.</p>	<p>"Sit"            "Your turn"            "Watch us"            "Are you playing?"</p>
Other	<p>For behavior which was difficult to code or that could not be identified as positive or negative. This code also summarizes dyadic behavior which is out of context. It also includes conflictive responses from dyad members such as when one dyad member responds positively while the other dyad member responds negatively.</p>	<p>"OK, you can play...No, better not"            Eye contact for over 3 sec.            Wandering.</p>

procedure, the behavior of the dyad members was treated as though it was from one child. Unless both dyad members ignored the entering child, the behavior of the dyad member who did not ignore the entering child was coded. Responses of dyad members that satisfied the previous requests or questions of the entering child were classified as 'positive' (e.g., entering child asked "What are you doing", and dyad members responded "We are playing"). Responses of dyad members that were contrary to previous requests or questions of the entering child were classified as 'negative' (e.g., entering child asked "Can I play?" and dyad members responded "No"). Dyadic 'ignoring' was coded when there was no dyadic response or attentive behavior, such as sustained eye contact, directed toward the entering child after the entering child had performed a behavior. Passing looks from dyad members to the entering child were considered as ignoring unless the look was direct and maintained for over three seconds in which case the behavior was coded as 'other'. When the entering child waited, dyadic ignoring was recorded if there was no dyadic behavior directed toward the entering child before the entering child changed to a different behavioral classification. Behavior of dyad members directed toward the entering child which was not in response to a previous request from the entering child was classified as 'initiations' (e.g., "Do you want to play?", "What are you doing?", unsolicited expansions to an entering child's question). Dyadic initiations were double coded as 'invitations' when the dyad members invited the entering child to participate in the game (e.g., "Do you want to play?"; "What color do you want to be?"). Responses to previous requests from the entering children that could not be given a positive or negative value or that could not be classified under any of the above codes were classified as 'other'. The 'other' category also included conflictive behavior from the dyad members such as when one dyad member responded positively while the other responded negatively. This classification also summarized behavior that was out of context (e.g., extensive periods of laughing, wandering).

In cases in which the entering child produced several behaviors, each classifiable by different codes, in rapid succession such that no opportunity for a dyadic response between each of these behaviors was possible, the dyadic behavior following each of the entering child's behaviors was coded as 'other'. However, if the coder could identify the dyadic response with one (or more) of the behavior(s) of the entering child, the dyadic response for that behavior(s) was coded correspondingly. For example, if the entering child said "Hi!, what are you doing?, can I play?" leaving no time for a dyadic response between each of these behavioral units, and the dyad member responded "No!", then the negative dyadic response ("No!") was recorded following the entering child's question "Can I play?", and the other behaviors ("Hi! and "What are you doing?") were recorded as followed by a dyadic response coded as 'other'. The decision to use the classification 'other' rather than 'ignore' was due to the ambiguity of the situation. In this way, the data for dyadic 'ignoring' were kept unambiguous. In cases when the entering child's behavior was followed by consecutive dyadic behaviors (e.g., "Can I play?" followed by "Yes, what is your name?"), the entering child's question "Can I play?" was coded as followed by a dyadic positive response ("Yes") and by a dyadic initiation ("What is your name?").

### 2.3.2. Reliability

A second observer naive to the purposes of the study was trained by the author using five pilot entry episodes which were not included in the data analyses. For reliability assessment, the second observer independently coded 17 (or 18.5%) randomly selected entry episodes.

To estimate the inter-observer reliability for the coding systems used to classify the behavior of the entering children and the dyad members, the procedures described by Bakeman and Gottman (1986) were followed. Keeping the sequential order intact, the behaviors coded by one observer were aligned with the behaviors coded by the second observer. The alignment procedure maximizes agreements without disrupting the

sequential record of each observer. When a behavior was missed by one of the observers, to maximize agreement and still maintain the sequential order intact, the behavior missed by the one coder was left as a blank. For example, if one observer recorded A,B,A,C,B,C,D and the second observer recorded A,B,A,E,C,B,C,A; the set for the first observer was aligned with the set for the second observer as A,B,A,(blank),C,B,C,D. Based on these aligned recorded sets, agreements were recorded for every instance in which the two observers recorded a behavior with the same code. In the above example, there were 6 agreements and 2 disagreements. The disagreements were due to (a) the first observer's omission of a behavior coded by the second observer (blank), and (b) a discrepancy in the coding of the last behavior in the sequences. Regarding inter-observer reliability for the duration of entering children's waiting (the only behavior for which duration records were kept), agreements were recorded when both observers coded the behavior as waiting and agreed about the time elapsed within 5 seconds.

Bakeman and Gottman (1986) referred to these procedures for recording agreements and disagreements between observers, as appropriate and conservative. They suggest that the recording of missed behaviors as disagreements is a procedure that, if anything, underestimates rather than overestimates the agreement between observers. Since alignments of recorded sequences were kept intact, reliability estimates based on inter-observer agreements and disagreements not only provided an estimate of the inter-observer reliability in the use of the coding systems, but also provided an estimate of the inter-observer reliability for the sequential recording of the behaviors, that is, the reliability with which the observers separated the behavioral stream into individual units.

Cohen's Kappa coefficients were calculated for each behavioral category included in the coding systems. Cohen's Kappa (Cohen, 1960) uses the general form  $(p_o - p_e) / (1 - p_e)$ , where  $p_o$  is the percentage of agreements observed and  $p_e$  is the percentage of agreements expected by chance. In this way, the formula corrects for the agreement that could be obtained by chance alone (For a review of the advantages of Kappa estimates

see Bakeman & Gottman, 1987; Hartmann, 1982). In Cohen's Kappa a 0.00 coefficient is interpreted as no-agreement beyond chance agreement. In general, Kappas lower than .60 should be viewed with concern and Kappas over .75 should be considered as excellent agreement (Bakeman & Gottman, 1987; Gelfand & Hartmann, 1975; Landis & Koch, 1977). The individual kappas were 0.85 for entering children's responses, 1.00 for comparing, 0.86 for inclusion, 1.00 for disagreements, 0.53 for agreements, 0.76 for self references, 0.66 for mimicking, 1.00 for helping, 0.92 for questions, 0.89 for statements, 0.82 for demands, 0.97 for waiting; 0.88 for activity-related, 0.88 for dyad members' positive responses, 0.94 for dyad members' negative responses, 0.95 for dyad members' ignoring, and 0.94 for dyadic initiations.

The low inter-observer reliabilities for the codes 'agree' and 'mimic' were likely due to the rare occurrence of behaviors in these categories and a tendency on the part of the observers to miss these behaviors when they did occur. This was especially true when they appeared consecutively with other behavior [e.g., "Cat (repeating what a dyad member just said). Yeah! I know another word"]. In this example, the short statements "Cat" and "Yeah!" were frequently missed as a mimic and an agreeable behavior, respectively.

# Chapter Three

## Results

### 3.1. Analytic Strategies

Since the total observation time as well as the total number of behaviors performed by children varied across groups, proportions were used as the primary units of analysis instead of frequency scores. For behaviors other than "waiting", proportions were calculated by dividing the total frequency of each behavior coded by the total number of behaviors performed by each child during an entry episode. For "waiting", proportions were calculated by dividing the total time waiting by the total duration of each child's entry episode.

The relations between the gender of the dyad members and the entering children and the mean proportions of entering children's and group members' behaviors were assessed using multivariate analysis of variance procedures. The multivariate approach was preferred over the univariate approach because the former approach reduces the redundant information that results from performing a series of univariate analyses when the dependent variables are interrelated (Bray & Maxwell, 1985; Kshirsagar, 1972; Huberty & Morris, 1989).

To assess the dependency between the behaviors of the entering children and the group members, sequential analyses were performed on the conditional probabilities with which children's entering strategies and group members' behaviors followed each other. The conditional probabilities of group members' responses to children's entering strategies were calculated as the total number of times a particular group members' behavior followed a particular entering strategy divided by the total number of times the entering children used that entering strategy. For example, the conditional probability of positive dyadic responses to questions posed by the entering children was obtained by dividing the total number of cases entering children's questions were followed by

positive dyadic responses divided by the total number of questions posed by entering children. The conditional probabilities of children's entering strategies given a preceding group members' behavior were calculated using the same procedures.<sup>1</sup> The general goal of sequential analysis is to determine the dependency structure between variables observed sequentially. For a sequence of behaviors, say A and B, sequential analysis determines whether the "target" behavior, B, follows the "given" behavior, A, in some systematic way. Dependency between a preceding behavior and a subsequent behavior implies that the preceding behavior has an effect on the subsequent behavior.

Dependency between a preceding behavior and a subsequent behavior when the data are collected over a period of time (e.g., the entry episode) implies that the dependency that exists between a preceding behavior and a subsequent behavior is consistent along the observation time. It could be possible that two behaviors are dependent at some point of the observation time but not during the other part of the observation time. In this case, the dependency would not be detectable using analytic strategies in which data are pooled across the total observation time. In the present study, since the data were pooled across the total entry episode, dependency between a preceding and a subsequent behavior should be interpreted as: (a) a direct effect of the preceding behavior on the subsequent behavior, and (b) an effect that occurred systematically throughout the entry episode (for a review of how to interpret results of sequential analysis, see Bakeman & Gottman, 1986).

The general hypothesis of independence is best assessed with Log-linear model procedures (Bakeman, Adamson, Strisik, in press; Bishop, Fienberg, & Holland, 1975;

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<sup>1</sup>The conditional probabilities were obtained by pooling the data across the subjects. Although it would have been better to obtain the probabilities for each subject and then obtain the mean across the subjects, this procedure was not possible using standard computer packages where Log-linear analysis is available. However, in preliminary analyses, a different method was used to assess the sequential dependency of the data. In the earlier approach, conditional probabilities were first obtained individually and then averaged across subjects. These mean probability estimates were then subjected to the z score analysis described by Bakeman and Gottman (1986). The results of the earlier analyses were comparable to the ones obtained using Log-linear procedures.



Kennedy, 1983). Log-linear analysis is becoming popular because of its statistical power and its conceptual resemblance with the traditional Anova. An important practical advantage of Log-linear analysis is that it is quite flexible and can be applied to the analysis of multiway tables (i.e., more than two dimensions) or to tables with structural zeros (i.e., empty cells). This flexibility was important for the data obtained in this study because some behavioral sequences had zero probability values (e.g., entering children's responses could occur only after dyadic initiations or invitations but not after dyadic positive or negative responses).

The contingency table, based on the number of times a behavior is followed by another behavior, consists of data that are not independent of each other (numerous observations are obtained from the same child). However, Bishop et al. (1975) observed that in the case of Markov models (as is the case of conditional probabilities of sequential events), a contingency table which includes a large number of observations can be analyzed with methods similar to those used for contingency tables with independent cell counts. It is important, however, that the contingency table be based on mutually exclusive behavioral categories (Bakeman et al., in press). Therefore, the behaviors coded as activity-related and activity-unrelated, which were double codes, were not included in the sequential analyses.

For a Log-linear model with two factors, independence means that there is no interaction between the factors (e.g., the behavior of the entering children and the dyad members). The Chi-Square Likelihood Ratio test consists of finding the goodness of fit of the Log-linear model without the interaction term and comparing it with a Log-linear model in which the interaction term is included. Once the hypothesis of independence is rejected, the contribution to the Likelihood Ratio test of each cell in the matrix is assessed. Each contribution produces a Chi-Square distribution with one degree of freedom if the sample size is large enough (an expected value of at least five in each cell will produce a good approximation to the Chi-Square distribution). By comparing the

contribution of each cell with the appropriate percentile of the Chi-Square distribution with one degree of freedom, and using Bonferroni adjustments for multiple comparisons, it is possible to identify the cells that deviate significantly from the hypothesis of independence. Looking at the sign of the deviation one can specify if a preceding behavior inhibits or facilitates a subsequent behavior.

To assess the relation between entry success and the gender and the behavior of the entering children, Stepwise Discriminant Analyses were performed. Discriminant Analyses were performed because the question of interest was whether successful and unsuccessful children (the categorical dependent variable) could be discriminated on the basis of the gender and the behaviors of the entering children and the group members (the independent variables). Linear Discriminant analysis obtains a set of linear combinations of the independent variables that best discriminate between the categorical variables (i.e., entry success versus entry failure).

A stepwise discriminant selection procedure was used because this method is an exploratory technique useful when the researcher has no definite theoretical grounds on which to specify which variables and in which order the variables should be entered in the discriminant equation. The stepwise procedure also is useful when the experimenter wants to reduce a large number of variables into a small set of variables that can discriminate between the different groups. The stepwise selection begins with no variables in the model and at each step selects from the set of variables the one that contributes the most to the discriminatory function using a pre-specified criterion (i.e., the F test and the Wilks' Lambda). The stepwise selection process stops when there are no more variables that have sufficient discriminatory power. Because in the stepwise procedure the variable that contributes the most to the discriminatory power of the model is selected first, if another variable is highly correlated with the one already entered, the latter may not enter the discriminant model because its contribution to the discriminant function has already been obtained by the variable already entered in the model. An

examination of the correlations among entering children's and group members' behaviors may help to understand why some variables may not have been included in the discriminant model. See Appendix C for a table of correlations among entering children's and group members' behaviors.<sup>2</sup> When interpreting the results of a stepwise discriminant analysis, the 'goodness' of a variable or a set of variables must be interpreted with caution since the rank order of a variable in the discriminant model may change with the addition of new variables in the analysis (For a review of issues in the interpretation of discriminant analysis, see Huberty, 1984).

The classificatory power of the discriminant model can best be interpreted by observing the percentage of cases correctly classified by the model. However, when one uses the same observations to compute a linear discriminant model and to obtain an estimate of the ability of this model to discriminate between the different groups, there is a bias that produces overoptimistic classification estimates. This bias was partially removed by using the Jackknifed classification procedure (Lachenbruch & Mickey, 1968).

## **3.2. Factors Related to the Behavior of the Entering Children**

### **3.2.1. Gender Differences and the Effect of the Gender of the Group Members**

Table 3-1 presents the mean proportion of behaviors performed by entering children for each gender condition. Examination of these proportions indicates that children waited for approximately half of the total observation time. Aside from waiting, the most frequent behaviors performed by the entering children were responses to dyadic

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<sup>2</sup>The correlations among the behaviors and the gender of entering children and group members are not presented in this table because these relations were tested with Manova procedures.

**Table 3-1: Mean Proportion of Entering Children's Behaviors for each Condition**

Behavior of the Entering Children	Boys Entering:			Girls Entering:		
	Males	Females	All	Males	Females	All
Aversive	.00	.00	.00	.00	.00	.00
Responses	.07	.12	.09*a	.10	.21	.16*b
Mimicking	.03	.01	.02*a	.01	.01	.01*b
Helping	.02	.02	.02	.03	.01	.02
Comparisons	.01	.00	.00	.00	.00	.00
Inclusive	.07*a	.03*b	.05	.03*b	.05*a	.04
Agree	.03	.01	.02*a	.01	.00	.01*b
Disagree	.01	.01	.01	.02	.02	.02
Self Referent	.05	.05	.05	.05	.04	.05
Questions	.13	.11	.12*a	.05	.08	.07*b
Demands	.03	.02	.03	.02	.02	.02
Statements	.10	.09	.10	.06	.10	.08
Waiting	.50	.36	.43	.59	.46	.52
Other	.16	.21	.19	.16	.11	.13
Act.-Unrelated	.11*a	.07*b	.09	.04*b	.10*a	.07
Act. Related	.29	.25	.27	.22	.25	.24

**Note 1.** All proportions with the exception of waiting are based on total frequency of behaviors. Proportion of waiting is based on total duration of the entry episode.

**Note 2.** Column proportions do not add to 1.00 because non-mutually exclusive codes are included (i.e., activity-related and activity-unrelated behaviors), and because waiting was calculated as time proportion whereas other behaviors were calculated as frequency proportions.

\*  $p < .05$ . Means not sharing the same superscript within a row are significantly different.

initiations, questions, and statements. Less prevalent behaviors were mimicking, helping, comparing, requests for inclusion, agreements, disagreements, making references to the self, and demands. Aversive behaviors did not occur. Entering children's behaviors were more likely to be related than unrelated to the groups' ongoing interaction.

To test the hypothesis that the gender of the entering children and dyad members are related to entering children's behavior, a 2 (gender of the entering children) by 2 (gender of the dyad) MANOVA was performed on the proportions<sup>3</sup> of the following entering children's behaviors: responses to dyadic initiations, mimics, helping, comparisons, inclusions, agreements, disagreements, self references, questions, demands, statements, waiting, activity-related, and activity-unrelated behaviors. Aversive behaviors were not included because they did not occur.

The results indicate a significant multivariate main effect for the gender of the entering child, and a significant multivariate interaction between the gender of the entering child and the gender of the dyad members [Wilks' Lambda,  $F(14,75) = 2.31, p < 0.01$ ;  $F(14,75) = 2.63, p < .01$ , respectively]. The multivariate main effect of the gender of the dyad members also approached significance [Wilks' Lambda,  $F(14,75) = 1.73, p < 0.07$ ].<sup>4</sup>

Follow up ANOVAs revealed that the main effect for the gender of the entering children was significant for responses to dyadic initiations [ $F(1,88) = 5.71, p < 0.05$ ], mimics [ $F(1,88) = 4.57, p < 0.05$ ], agreements [ $F(1,88) = 4.29, p < 0.05$ ], and questions [ $F(1,88) = 8.73, p < 0.01$ ].<sup>5</sup> Entering boys responded to dyadic initiations less frequently

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<sup>3</sup>Similar results were found when Arc-Sine-transformed proportions were used in a similar analysis.

<sup>4</sup>The main effect of the gender of the dyad members was significant for entering children's responses to dyadic initiations [ $F(1,88) = 8.36, p < 0.01$ ] and time in waiting [ $F(1,88) = 5.37, p < 0.05$ ]. Entering children responded less to male dyads than to female dyads (which is probably due to the reduced number of initiations performed by the male dyads compared to the female dyads) and waited shorter time when they entered female dyads than when they entered male dyads.

<sup>5</sup>The univariate effect for waiting approached significance [ $F(1) = 2.88, p < 0.10$ ] suggesting a trend for entering girls to wait longer than entering boys.

than the entering girls. Also, entering boys mimicked, agreed, and questioned more than the entering girls.

The univariate interaction between the gender of the entering children and the gender of the dyad members was significant for inclusive behavior [ $F(1,88) = 4.35, p < 0.05$ ] and for activity-unrelated behavior [ $F(1,88) = 6.57, p < 0.01$ ].<sup>6</sup> Entering children performed more inclusive and activity-unrelated behaviors when they approached same-sex than opposite-sex dyads.

### 3.2.2. Assessing the Dependency of Entering Children's Behavior on Preceding Dyadic Behavior

It was expected that the behavior of the entering children would be dependent on the preceding behavior of the dyad members (see Table 3-2). The results of the Log-linear analysis performed on the probabilities with which entering children's behaviors followed the preceding behaviors of the dyad members indicated that the model of independence (that there is no dependency between the preceding behavior of the dyad members and the following behavior of the entering child) was rejected [Likelihood-ratio  $X^2(60, N = 2771) = 959.9, p < .0001$ ]. To determine which behavioral sequences contributed significantly to the solution, the individual Likelihood Ratio Chi-Squares were observed for each sequence. Using the Bonferroni approach to multiple comparisons, the traditional .05 alpha probability level was divided by the total number of tests. Since a total of 60 tests were performed on these data (12 behaviors of the entering children times 5 behaviors of the dyad members, excluding behaviors coded as 'other'), the null hypothesis (that the entering child's behavior was independent of preceding dyadic behavior) was rejected only if the alpha probability was lower than

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<sup>6</sup>For a two by two ANOVA table with two levels in each factor, a significant interaction in the absence of main effects implies that the difference between the means at each level of the other factor is significant, and that the interaction effect is the same at both levels of the other factor (For a detailed description of how to decompose and interpret interaction effects see (Rosenthal & Rosnow, 1984; Rosnow & Rosenthal, 1989).

**Table 3-2: Observed Conditional Probabilities of Entering Children's Behavior Following Preceding Dyadic Behavior**

Subsequent Behavior of the Entering Children	Preceding Dyadic Behavior				
	Positive	Negative	Ignore	Initiate <sup>a</sup>	Invite
Respond	.00	.00	.00	.36+	.41+
Mimic	.05+	.02	.04+	.01	.01
Compare	.00	.00	.01	.01	.00
Help	.05	.03	.06+	.01	.00
Inclusive	.03	.01	.05+	.02	.05
Agree	.01	.01	.01	.01	.03
Disagree	.01	.15+	.02	.00	.01
Self ref.	.05	.04	.05	.05	.07
Question	.10	.09	.12+	.11	.11
Demand	.03	.04	.03	.01	.02
Statement	.15+	.13	.14+	.08-	.06-
Wait	.38+	.32	.28	.11-	.15-

Note 1. Column probabilities do not sum to 1.00 because entering children's behaviors coded as 'other' are not included.

<sup>a</sup> Dyadic initiations without invitations included.

+ = Significant facilitative effect,  $p < .0008$ .

- = Significant inhibitory effect,  $p < .0008$ .

.0008 (.05/60), which for a Chi-Square with one degree of freedom is equivalent to Likelihood Ratio Chi-Squares larger than 12.

The results indicated that dyadic positive responses facilitated entering children's mimics, statements, and waiting [ $X^2$ s (1,  $N = 2771$ ) = 12.3, 16.4, and 52.4,  $p < .0008$ , respectively]. Dyadic negative responses elicited disagreements from the entering children [ $X^2$  (1,  $N = 2771$ ) = 62.4,  $p < .0008$ ]. Dyadic ignoring facilitated mimics, help, inclusive behavior, questions, and statements, [ $X^2$ s (1,  $N = 2771$ ) = 36.2, 68.3, 29.1, 43.8, 47.7,  $p < .0008$ , respectively]. Dyadic initiations and invitations were typically responded to by the entering children [ $X^2$ s (1,  $N = 2771$ ) = 396.2 and 270.7,  $p < .0008$ , respectively], and inhibited waiting [ $X^2$ s (1,  $N = 2771$ ) = -76.4 and -38.0,  $p < .0008$ , respectively] and statements [ $X^2$ s (1,  $N = 2771$ ) = -25.3 and -16.9,  $p < .0008$ , respectively].

### 3.2.3. Summary

The findings provided moderate support for the hypothesis that boys and girls differ in the behaviors they perform during group entry attempts. Entering boys responded less to dyadic initiations, and mimicked, questioned, and agreed with the dyad members more frequently than entering girls. The gender differences that emerged for mimics and agreements should be viewed with some caution, however, because the interobserver reliabilities for these behaviors were low. There also was a trend for entering girls to wait longer than entering boys, particularly during entry attempts into male dyads.

Consistent with predictions, the behavior of the entering children was influenced by the gender of the dyad members. Entering children performed more inclusive and activity-unrelated behaviors when they entered same-sex dyads than when they entered opposite-sex dyads.

As predicted, the behavior of the entering children was not only related to their gender and the gender of the other children in the interaction but also to the preceding behavior of the group members. Entering children reciprocated negative responses from



the dyad members with disagreeable behaviors. When the dyad members ignored the entering children, the latter became more active by mimicking, questioning, making statements, helping, or performing inclusive behaviors. When the dyad members were active and initiated interactions toward the entering children or invited the entering children to participate, the entering children typically responded positively to these dyadic initiations and invitations, and the likelihood of at least some socially active behaviors (e.g., statements) decreased.

### 3.3. Factors Related to the Behavior of the Dyad Members

#### 3.3.1. Gender Differences and the Effect of the Gender of the Entering Children

Table 3-3 presents the mean proportions of dyadic behaviors for each condition. These proportions indicate that dyadic ignoring and dyadic initiations toward the entering children (which in this table include invitations) characterized most of the behavior of the group members. Positive and, particularly, negative dyadic responses to the entering children occurred infrequently.

To test the hypothesis that the gender of the entering children and the dyad members are related to the behavior of the dyad members, a 2 (the gender of the entering children) by 2 (the gender of the dyad) MANOVA was performed on the proportion<sup>7</sup> of dyadic positive, negative, and ignoring responses and dyadic initiations. Only the multivariate effect of the gender of the dyad members was significant [Wilks' Lambda,  $F(4,85) = 2.93, p < .05$ ]. Significant univariate main effects for gender of the dyad were found for ignoring [ $F(1,88) = 10.58, p < .001$ ], and social initiations [ $F(1,88) = 7.60, p < .01$ ]. Male dyads ignored the entering children more than did female dyads, and female dyads initiated more interactions toward the entering children than did male dyads.

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<sup>7</sup>Similar results were found when Arc-Sine-transformed proportions were used in a similar analysis.

**Table 3-3: Mean Proportion of Dyadic Behaviors for each Condition**

Behaviors of the Dyad Members	Male Dyads			Female Dyads		
	Ent'g	Ent'g	All	Ent'g	Ent'g	All
	Boys	Girls		Boys	Girls	
Positive	.08	.05	.07	.05	.06	.06
Negative	.03	.02	.02	.04	.02	.03
Ignoring	.39	.38	.39 <sup>*a</sup>	.26	.20	.24 <sup>*b</sup>
Initiation <sup>a</sup>	.26	.29	.28 <sup>*a</sup>	.38	.43	.41 <sup>*b</sup>
Other	.19	.15	.17	.16	.15	.15

Note 1. Proportions are based on total frequency of behaviors per child.

Note 2. Column proportions do not add to 1.00 because of rounding errors.

<sup>a</sup> Initiations include invitations.

\*  $p < .05$ . Means not sharing the same superscript within a row are significantly different.

### 3.3.2. Assessing the Dependency of Dyadic Behavior on Preceding Entering Children's Behavior

It was expected that the behavior of the dyad members would be influenced by the preceding behavior of the entering children. Table 3-4 presents the conditional probabilities with which dyadic behaviors followed the preceding behaviors of the entering children. The results indicate that the model of independence (that there is no dependency between a preceding behavior of the entering children and a subsequent behavior of the dyad members) could be rejected using the Likelihood-Ratio Chi-Square test [ $\chi^2(57, N = 2755) = 1138.7, p < .0001$ ]. To determine which behavioral sequences contributed significantly to the solution, the individual Likelihood-Ratio Chi-Squares were observed for each sequence. Using the Bonferroni approach to multiple comparisons, the traditional .05 alpha probability level was divided by the total number of tests. Since a total of 60 tests were performed on these data (12 behaviors of the entering children times 5 behaviors of the dyad members, excluding behavior coded as 'other'), the null hypothesis (that preceding and subsequent behaviors were independent of each other) was rejected only if the alpha probability was less than .0008 (.05/60), which for a Chi-Square with one degree of freedom is equivalent to Likelihood Ratio Chi-Squares larger than 12.

The results indicated that entering children's helping behavior, questions, and demands led to positive dyadic responses [ $\chi^2_s(1, N = 2755) = 42.8, 331.3, 45.2, p < .0008$ , respectively]. Entering children's helping, inclusions, disagreements, and self references elicited negative dyadic responses [ $\chi^2_s(1, N = 2755) = 59.0, 51.5, 114.0, \text{ and } 14.0, p < .0008$ , respectively]. Entering children's mimicking and waiting were typically ignored by the dyad members [ $\chi^2_s(1, N = 2755) = 37.6 \text{ and } 626.8, p < .0008$ , respectively]. Entering children's responses to dyadic initiations, helping, inclusions, disagreements, self references, questions, statements and demands decreased dyadic ignoring [ $\chi^2_s(1, N = 2755) = -51.1, -30.7, -27.8, -22.2, -39.3, -91.7, -28.4, \text{ and } -27.3, p <$

**Table 3-4: Observed Conditional Probabilities of Dyadic Behavior Following Preceding Entering Children's Behavior**

Preceding Behavior of the Entering Children	Subsequent Dyadic Behavior				
	Posit.	Negat.	Ignore	Init. <sup>a</sup>	Invite
Respond	.03	.03	.27-	.23+	.23+
Mimic	.09	.00	.66+	.05	.01
Compare	.20	.10	.45	.05	.00
Help	.22+	.19+	.26-	.08	.01
Inclusive	.09	.20+	.21-	.13	.18+
Agree	.07	.00	.44	.09	.07
Disagree	.11	.39+	.17-	.05	.03
Self references	.07	.08+	.30-	.20+	.08
Question	.39+	.03	.22-	.14	.08
Statement	.09	.02	.41-	.13	.06
Demand	.26+	.09	.20-	.10	.06
Wait	.00	.00	.74+	.10+	.06

Note 1. Row probabilities do not add to 1.00 because dyadic responses coded as 'other' are not included.

<sup>a</sup> Dyadic initiations without invitations included.

+ = Significant facilitative effect,  $p < .0008$ .

- = Significant inhibitory effect,  $p < .0008$ .

.0008, respectively]. Entering children's responses to previous dyadic initiations, self references, and waiting fostered further social initiations from the dyad members [ $X^2$ s (1,  $N = 2755$ ) = 46.9, 26.4, and 30.0,  $p < .0008$ , respectively]. Entering children's responses to previous dyadic initiations as well as inclusive behavior led to dyadic invitations [ $X^2$ s (1,  $N = 2755$ ) = 90.3 and 25.7,  $p < .0008$ , respectively].

### 3.3.3. Summary

The findings indicate that male and female dyads did not differ in the proportion of positive and negative responses they made toward the entering children. They did, however, differ in the interest they showed in the entering children. Female dyads clearly were more attentive to the entering children, ignoring them less often and initiating more interactions toward them than male dyads. Contrary to expectations, entering boys and girls were treated similarly by male and female dyads.

Dyadic behavior was affected by preceding behavior of the entering children, as expected. Consistent with Putallaz and Gottman (1981) and Dodge et al. (1983) dyad members typically ignored entering children who waited and responded negatively to entering children's disagreements. Entering children's mimics also were typically ignored by the dyad members. Dyadic ignoring was unlikely after entering children responded to dyadic initiations or invitations, or after attention-seeking entering strategies such as helping, requests for inclusion, references to the self, disagreements, questions, demands, and general statements. Entering children's questions and demands were typically responded to positively by the dyad members. Social initiations on the part of the dyad members occurred most frequently after the entering children responded to previous dyadic initiations and invitations, or waited. An invitation to participate in the game on the part of the dyad members was most likely after the entering children responded to previous dyadic initiations. Other group members' responses to children's entering strategies were not straightforward. Entering children's helping increased the likelihood of both positive and negative group members' responses, self references

increased the likelihood of both dyadic initiations and negative responses, and inclusive behavior increased the likelihood of both dyadic invitations and negative group members' responses.

### 3.4. Factors Related to Group Entry Success

It was expected that entry success would be predicted by the gender of the entering children, the gender of the dyad members, the behavior of the entering children, and the behavior of the dyad members. A discriminant analysis was performed with the independent variables including the gender of the entering children, the gender of the dyad members, the interaction between the latter two factors, and the behavior of the entering children and the dyad members. The dependent variable was the categorical variable 'success'. The  $F$  ratio selected for entering or removing a variable was 4.0, which for the present analysis corresponded to a  $p < .05$ .

The final model selected by the discriminant analysis included dyadic initiations toward the entering children [ $F(1,90) = 62.7, p < 0.05$ ], entering children's activity-related behavior [ $F(2,89) = 11.8, p < 0.05$ ], and statements [ $F(3,88) = 15.2, p < 0.05$ ], and positive dyadic responses toward the entering children [ $F(4,87) = 4.2, p < .05$ ]. The order in which the variables were entered in the discriminant model is represented by the first degree of freedom. Dyadic initiations was the first variable entered (1,90) and therefore, was the variable that contributed the most to the discriminant function. Positive dyadic responses was the last variable entered in the model (4,87) and barely surpassed the  $F$  ratio criteria for inclusion in the discriminant model. The Jackknifed classification suggested that this model classified correctly 84 % of the successful children and 93 % of the unsuccessful children. By chance alone, it would be possible to classify about 68% of the successful children (since success occurred in about 68% of the cases) and about 32% of the unsuccessful children. Thus, this model was useful to discriminate successful from unsuccessful children. As can be seen in Table 3-5,

successful children received substantially more dyadic initiations and performed more activity-related behavior than unsuccessful children. The differences in the mean proportions of statements and positive dyadic responses between successful and unsuccessful children were minimal.

To assess if the above model is or is not more useful to predict entry success than a model obtained from the behavior of the entering children alone, a similar stepwise discriminant analysis was performed excluding the behavior of the dyad members. The final model included entering children's responses to dyadic initiations ( $F(1,90) = 19.8, p < 0.05$ ), waiting ( $F(2,89) = 13.24, p < 0.05$ ), activity-related behavior ( $F(3,88) = 8.32, p < 0.05$ ), and statements ( $F(4,87) = 9.13, p < 0.05$ ). The Jackknifed classification indicated that this model classified correctly 76.2% of the successful cases and 89.7% of the unsuccessful cases. Thus, this model has less classificatory power than the model obtained from the previous discriminatory analysis in which both the dyadic and entering children's behaviors were included. As can be observed in Table 3-6, successful children responded substantially more to dyadic initiations, waited significantly less, and performed more activity-related behavior than unsuccessful children. The difference in the proportion of statements made by successful and unsuccessful children was minimal. Since by definition entering children's responses occurred after dyadic initiations, the finding that entering children's responsiveness to dyadic initiations was the variable that discriminated the best between successful and unsuccessful children is consistent with the inclusion of dyadic initiations as the best discriminant variable in the previous discriminant analysis.

Thus, the findings of these two discriminatory analyses indicate that successful children entered dyads whose members initiated more interactions toward them than the dyads approached by unsuccessful children. Successful children responded contingently to these dyadic initiations and performed more activity-related behavior, made fewer statements, and waited less than did unsuccessful children.

**Table 3-5: Proportions of Entering Children's and Group Members' Behaviors Discriminating Successful from Unsuccessful Children**

Behavior	Successful	Unsuccessful
Dyadic Initiat.	.55	.13
Act.-Related	.28	.23
Statements	.09	.11
Dyadic Positive	.06	.07

Note. The ordering of the behaviors represent the order in which they were entered in the discriminant model.



**Table 3-6: Proportions of Entering Children's Behaviors Discriminating Successful from Unsuccessful Children**

<b>Behavior</b>	<b>Successful</b>	<b>Unsuccessful</b>
<b>Responses</b>	.18	.04
<b>Waiting</b>	.40	.64
<b>Act.-Related</b>	.28	.23
<b>Statements</b>	.09	.11

Note. The ordering of the behaviors represent the order in which they were entered in the discriminant model.

### 3.4.1. Predicting Success from Dyadic Invitations

A detailed examination of the kind of dyadic initiations directed toward the entering children indicated that about half of these initiations consisted of invitations to the entering children to participate in the board game. In about half of the 92 group entry episodes observed, dyad members took the initiative to invite the entering children to participate without a previous direct or indirect request on the part of the entering children to do so. These children are referred to as 'invited'. Children who requested participation before the dyad members had invited are referred to as 'uninvited'. Note that only the first dyadic invitation or the first entering children's request for participation was considered to classify children as invited or uninvited (later occurring dyadic invitations or entering children's inclusive behaviors were not considered). As common sense would predict, all of the invited children ended up playing the game. Consequently, over two thirds of the successful children played the game as a result of an initial dyadic invitation.

Because of the direct implication of dyadic invitations for entry success, the data were examined further to determine whether invited and uninvited children could be discriminated on the basis of their gender, the gender of the dyad members, and the behaviors performed by the entering children and the dyad members. For invited children, the mean number of behaviors performed by entering children previous to the occurrence of the dyadic invitation was calculated ( $M = 6.7$ ,  $SD = 5.3$ , min. value = 2, max. value = 29). About 90% of the invited children performed twelve or fewer behaviors before the dyadic invitation occurred. Thus, it seemed reasonable to assume that the first twelve behaviors performed by the entering children and the dyad members could provide information regarding the behaviors predictive of dyadic invitations. The unit of analysis used for this assessment was the proportion of behaviors based on the first twelve behaviors for the uninvited sample, and on the total number of behaviors before the dyadic invitation occurred in the invited sample.

A Stepwise Discriminant Analysis was performed to explore a model that could discriminate between children who were and were not initially invited by the dyad members. The predictor variables included the gender of the entering children, the gender of the dyad, the interaction between these two variables, and the behaviors of the entering children and the dyad members. However, in this analysis dyadic initiations did not include dyadic invitations because behaviors were counted until the first invitation occurred. In addition, proportion of time waiting was not included in this analysis because there was no information collected regarding the duration of the entry episode up to the point of invitation or up to twelve behaviors. Also, entering children's inclusive behavior was not included because initial dyadic invitations were defined as such only when the entering children did not directly or indirectly request participation (i.e., inclusive behavior) previous to the dyadic invitation.

The final model included dyadic initiations as the only variable discriminating between invited and uninvited groups ( $M_{\text{invited}} = .55$ ,  $M_{\text{uninvited}} = .31$ ,  $F(1,89) = 13.67$ ,  $p < 0.05$ ). The Jackknifed classification suggested that this model classified correctly 67.4% of the invited group, and 70.8% of the uninvited group. Since by chance alone, one could classify about 48% of the invited and 52% of the uninvited children, this model was useful to discriminate between the invited and the uninvited children. The results indicate that invited children received a larger proportion of dyadic initiations than the uninvited children.

A similar analysis to the above but excluding dyadic behavior was performed to assess whether or not the above model, which focused on the behavior of both entering children and dyad members, was more useful than a model which focused on the behavior of the entering children alone. Entering children's responses to dyadic initiations was the only variable which significantly discriminated between invited and uninvited children [ $M_{\text{invited}} = .22$ ,  $M_{\text{uninvited}} = .12$ ,  $F(1,89) = 7.19$ ,  $p < 0.05$ ]. The Jackknifed classification indicated that this model classified correctly 55.8% of the

invited children and 70.8% of the uninvited children. Thus, the model was not very useful to classify invited children. Uninvited children responded less to dyadic initiations than invited children. Since responses to dyadic initiations were dependent upon dyadic initiations, this model was consistent with the earlier model which suggested that dyadic initiations discriminated between invited and uninvited children. However, dyadic initiations was a more useful variable to discriminate both the invited and the uninvited children.

### 3.4.2. A Further Look at Gender as a Predictor of Entry Success

The final models in all of the discriminant analyses described above did not include gender as a predictor variable. However, gender must be implicated because gender differences emerged in the behaviors that best predicted entry success and dyadic invitations, mainly dyadic initiations and entering children's responsiveness.

To assess differences in the rate of entry success across the four gender conditions (see Table 3-7), a Categorical Linear Modeling analysis<sup>8</sup> was performed. The results indicated that girls entering female dyads were the most successful group [ $X^2(1, N = 92) = 5.35, p < .05$ ]. No differences emerged across the other three conditions. Consistent with prediction, girls were more successful than boys during their entry attempts into female dyads. Contrary to prediction, boys were not more successful than girls during entry attempts into male dyads.

Since female dyads initiated more interactions than male dyads and since dyadic initiations led to dyadic invitations, it was likely that female dyads also invited the entering children more frequently than male dyads (See Table 3-8). To assess differences across groups in the proportion of children initially invited by the dyad members, a Categorical Model Linear analysis was performed on the rate of initial invitations. The

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<sup>8</sup>This approach uses log-linear modeling procedures and permits the test of differences among cell probabilities (SAS, 1985).

**Table 3-7: Rate (%) of Entry Success for each Condition**

Gender of Entering Children	Gender of Dyad Members					
	Males	N	Females	N	Total	N
Boys	65.2	23	63.6	22	64.4	45
Girls	54.5	22	88.0*	25	72.3	47
Total	59.9	45	75.8	47	68.4	92

Note. Percentages are based on the total number of cases observed in each cell.

N = Total number of cases in each cell.

\*  $p < .05$

**Table 3-8: Percentage of "Invited"<sup>a</sup> Children for each Condition**

Gender of the Entering Children	Gender of the Dyad Members					
	Males	N	Females	N	Total	N
Boys	34.7	23	54.5	22	44.8	45
Girls	36.3	22	60.0	25	48.2	47
Total	35.5*a	45	57.4*b	47	46.5	92

Note. Percentages are based on the total number of cases observed in each cell.

<sup>a</sup> Invited by the dyad members without a previous request from the entering children to do so.

\*  $p < .05$ . Means not sharing the same superscript are significantly different.

N = Total number of cases in each cell.

results indicated a significant effect of the gender of the dyad on the rate of initial invitations [ $X^2(1, N = 92) = 4.27, p < .05$ ]. Female dyads invited entering children to participate without a previous request by the entering children to do so more frequently than did male dyads.

Although, invitations could account for increased overall entry into female dyads, they could not account for the higher entry success of girls than boys entering female dyads. Recall that female dyads invited as many boys as girls to join in the game. The higher responsiveness of entering girls than of entering boys to female initiations may have accounted for the greater success of girls entering female dyads because entering children's responsiveness predicted entry success.

The difference in the rate of entry success for girls and boys entering female dyads was magnified when the group members did not invite the entering children to participate in the game ('uninvited' children). In 47 of the 49 uninvited cases, the entering children requested inclusion. Thus, the 'uninvited' children took the initiative to request participation without being first invited by the dyad members. The rate of entry success for these children can be seen in Table 3-9.

A Categorical Linear Modeling analysis performed on the rate of entry success for children in the four conditions indicated that uninvited boys entering female dyads had little chance of gaining entry, whereas uninvited girls entering female dyads had a high chance of gaining entry [ $X^2(1, N = 49) = 4.07, p < .05$ ]. Thus, the higher entry success of girls entering female dyads was due to the fact that uninvited boys seldom gained entry into female dyads whereas uninvited girls were successful in most of the cases. Unfortunately, the number of uninvited children in each cell, particularly of uninvited children entering female dyads, was too small to allow further analyses of these data.

**Table 3-9: Rate (%) of Entry Success of Uninvited<sup>a</sup> Children for each Condition**

Gender of the Entering Children	Gender of the Dyad Members					
	Males	N	Females	N	Total	N
Boys	46.6	15	10.0*a	10	28.3	25
Girls	42.8	14	70.0*b	10	56.4	24
Total	44.7	29	40.0	20	42.4	49

Note. Percentages are based on total number of cases observed in each cell.

<sup>a</sup> In most of these cases (47/49) the entering children took the initiative to request participation.

\*  $p < .05$ . Means not sharing the same superscript are significantly different.

N = Total number of cases in each cell.



### **3.4.3. Summary.**

The findings indicated that the best predictors of entry success were dyadic invitations, dyadic social initiations to the entering children, and entering children's responsiveness to these dyadic initiations. Successful children also performed more activity-related behavior, waited less, and made fewer general statements than the unsuccessful children.

Consistent with expectations, entry success was predictable from knowledge of the gender of the entering children and the dyad members. Girls entering female dyads were the most successful of the four groups, with no differences observed across the other three conditions. The advantage of girls over boys during entry attempts into female groups was particularly obvious when the entering children took the initiative and requested inclusion before the dyad members invited them. The higher success rate of girls entering female dyads was accounted for by gender differences in the behavior of the dyad members and the entering children. Female dyads initiated and invited entering children to participate more than did male dyads, and these behaviors predicted entry success. Entering girls were more responsive than entering boys to female dyadic initiations, a strategy which also predicted entry success.

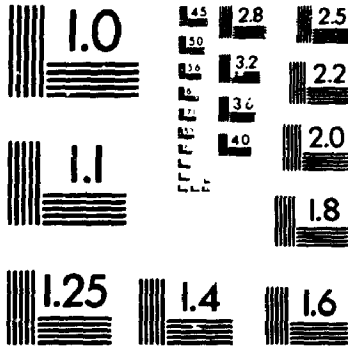
## **3.5. Results of the Informal Interview with Children**

Children's responses to the interview conducted by the experimenter indicated that the board game was liked by all of the children and that all of the entering children wanted to play the game. Entering children who did not achieve entry success were asked why they did not participate in the game. Most of them (88%) could not give a clear cut explanation (i.e., "I don't know"). The rest complained that the dyad members did not let them play. These complaints were refuted by dyad members in about half of the cases. When dyad members were asked for their reasons for not permitting the entering children to participate in the game, most of them (92%) responded that they

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were not told to do so by the experimenter (92%). The rest of the dyad members were unclear as to their reasons (e.g., "I don't know").

Thus, children's responses to the interview suggest that entering children's failure to play the board game was not due to a lack of interest on the part of the entering children to play. Indeed, most entering children requested participation in the game when the group members did not invite them.

# Chapter Four

## Discussion

Three sets of results emerged in the present study. First, the processes occurring during group entry attempts were different for boys' and girls' entry attempts into same- and opposite-sex peer groups. Second, entry success was best predicted by the social attention shown by the group members toward the entering children and the responsiveness of the entering children to the group members' social initiations. The relation between gender and entry success was accounted for by gender differences in the group members' social attentiveness toward newcomers and the entering children's responsiveness to group members' social initiations. Third, both the entering children and the group members actively and independently contributed to the outcome of the group entry episodes. Thus, the present study indicates that the group entry process is influenced by (a) individual dispositions affecting the behavior of both the entering child and the group members, (b) contextual factors affecting the behavior of both the entering child and the group members, and (c) reciprocal effects between the behavior of the entering child and the group members.

The evidence in support of these propositions is the focus of discussion in this chapter. The two first sections deal with factors accounting for the behavior of the entering children and the group members, respectively. In the third section the relations among entry success and the gender and behavior of the entering children and the group members are considered. Next, a summary of the processes involved during girls' and boys' entry attempts into male and female groups is presented. The subsequent sections deal with conceptual and practical implications of the findings, questions for future research, and methodological limitations of the present study. Finally, a model of the group entry process is proposed.

## 4.1. Understanding Children's Entering Strategies

Maccoby (1989) suggests that boys and girls belong to two different cultures. They spend most of the time in same-sex groups, prefer and seek different activities, and approach similar social situations with different expectations, attitudes, and behaviors. The gender stereotypes held by children about the behavior and personality of boys and girls are so strongly ingrained that they influence children's preferences for same-sex peers, regardless of the actual behavior or preferences of the peers (Martin, 1989). Given the two different worlds in which boys and girls live, it is not surprising that they also approach peer groups in somewhat different ways.

Although the entering boys and entering girls behaved similarly in many respects, entering boys responded less to group members' social initiations, and mimicked group members' behavior more, questioned the group members more, and agreed more with the group members (e.g., "That's good", "Yeah!") than entering girls. There was a trend for entering girls to quietly observe the interactions between dyad members (i.e., wait) for longer periods of time than entering boys. It is important to note, however, that the gender differences in agreements and mimics should be viewed with some caution because the differences were small and the interobserver reliabilities for these behaviors were low. Also, it is not possible to draw conclusions regarding lack of gender differences in entering children's demands, statements, helping, comparing, disagreements, and self-references because of the relative infrequency with which these behaviors occurred.

The greater number of questions posed by the entering boys than the entering girls is contrary to Phinney's (1979) findings that girls question more than boys during social initiations. One explanation for the contradictory findings may be that girls question more than boys regarding personal topics whereas boys question more than girls regarding activity-related topics (Jormakka, 1976). Whereas Phinney (1979) observed children's social initiations during free time in the school yard, in the present

investigation, children were observed during attempts to enter groups composed of children who were focused on a game activity. Therefore, personal information gathering on the part of the entering children may have been disruptive, and thus, very unlikely to occur.

The lack of gender differences in the proportion of activity-related and -unrelated behavior does not necessarily contradict past findings that girls seek and provide more personal information and attend to social stimuli more than males (Jormakka, 1976; Newcomb & Meister, 1985). In the present study activity-unrelated and -related behavior did not uniformly reflect personal-subjective or activity-objective constructs, respectively, as was the case in the Jormakka (1976) and the Newcomb and Meister (1985) studies. Activity-unrelated behavior included references to people in addition to references to aspects of the surroundings not related to the group's ongoing interaction (e.g., the camera in the room). Activity-related behavior included subjective and personal information about the ongoing interaction (e.g., "Do you like the game?"). Thus, entering boys and girls did not differ in the relevancy of their behavior with the group's ongoing activity. This finding contradicts the Putallaz and Wasserman (1989) observation that boys are more likely than girls to redirect the group's ongoing interaction. Recall, however, that Putallaz and Wasserman observed children during school recess, and therefore, it is reasonable to assume that in their study, most group entry attempts were directed to well acquainted peers. Thus, in the present study the children were less familiar with each other than in the Putallaz and Wasserman study. Also, since Putallaz and Wasserman observed children during school recess, the activities in which group members were involved likely were less structured than the board game used in this study. Perhaps, boys are less likely to redirect the group's ongoing interaction when they attempt to enter groups composed of unfamiliar peers or when the group members are involved in structured activities. Because of the conceptual importance that researchers have given to entering strategies that maintain the frame of

reference of the group's ongoing interaction, the question of gender differences in this particular behavior needs to be addressed in future research.

The most interesting finding was the large gender difference in entering children's responsiveness to group members' social initiations. Although there were no significant differences in the proportion of social initiations directed toward entering boys and entering girls on the part of the group members, entering boys responded to these social initiations substantially less often than entering girls. The findings that entering girls were more likely to attend quietly to the group's ongoing interaction and to respond readily to the conversation initiated by the group members than boys (see Dodge et al., 1986; Phinney, 1979 for similar findings) corresponds with the Wine et al. (1980) proposition that "women are vigilant and adaptively responsive to the nuances of interpersonal interactions" (pp. 157). The findings also are consistent with observations that females listen more and interrupt less during social interactions than males (Doyle, 1985; Maccoby, 1989; Wine et al., 1980). Some researchers have explained the increased social responsiveness of females than males as the product of the 'social' role given to women and the 'task' role given to men in our society. The assignment of differential roles to men and women, in turn, may be related to socialization practices and biological dispositions (Doyle, 1985; Eagly, 1987; Maccoby, 1980; 1989). The passive-responsive behavior of the entering girls and the active and non-responsive behavior of the entering boys also may reflect the tendency of girls to be more fearful, anxious, cautious, and shy, and less domineering than boys (Block, 1976; Coie et al., 1982; Maccoby, 1989; Rushton, Brainerd, & Pressley, 1983).

Consistent with the observations of Dodge et al. (1986), the entering children's behavior was 'connected' with the behavior of the group members. Entering children reciprocated negative dyadic responses with disagreements. Not surprisingly, negative dyadic responses inhibited the entering children from requesting participation in the game. Obviously the entering children were aware that group members were not being

socially receptive. Despite the negative behavior of the group members, however, the entering children did not shy away and become passive. They continued to attempt to draw the attention of the group members.

If negative dyadic responses did not stop the entering children from continuing to interact with the group members, ignoring by the dyad members did so even less. Indeed, the more the group members ignored the entering children, the more socially active and inquisitive they became. Further, dyadic ignoring did not prevent the entering children from requesting inclusion in the game. Perhaps, since group members' ignoring is so common during children's group entry attempts (e.g., Corsaro, 1981; Putallaz & Gottman, 1981), entering children do not interpret it as meaning rejection. Presumably, at some point in development, individuals change the way they interpret group members' ignoring. It is unlikely that adults, in a similar social situation, would persist in their social initiations toward a peer group that ignores them. For adults, ignoring of a newcomer is impolite and expresses social rejection.

Consistent with past research in general communication processes (e.g., Kellermann, 1987), the interactional pattern between the entering children and the group members was characterized by rhythmic and reciprocal verbal interchanges. When the dyad members initiated the conversation, the entering children typically responded positively and at least some of their attention-seeking behaviors decreased (e.g., they made fewer statements). The entering children did not typically request inclusion in the game, however, while the dyad members were initiating interactions with them. It seems that the entering children avoided taking the lead once the initiations were forthcoming from the dyad members. Perhaps the children were aware that while the dyad members were leading the conversation, an invitation to participate would eventually come (as indeed was the case).

The above interactional processes occurred for children *in general*, however, these patterns were more characteristic of the children who entered same-sex than opposite-sex dyads. For example, although the male dyad members generally did not attend to the



entering girls, rather than attempting to capture the boys' attention, the girls became even more passive. A tendency of girls to become particularly passive in the presence of boys also has been observed in other social situations (e.g., Jacklin & Maccoby, 1978). The passive behavior of the entering girls may be partly the result of past experiences with boys. There is some evidence that girls avoid boys because of their physical roughness and domineering behavior (Maccoby, 1989). Although the behavior of the male dyads was not domineering or rough, children's stereotypes about boys and girls strongly influence their behavior even in the face of contrasting evidence (Martin, 1989). As Kellermann (1987) noted "individuals bring past experiences to encounters in the form of knowledge and behavior patterns" (pp. 192).

For boys entering female dyads, the opposite pattern was evident. Female dyad members generally were attentive to the entering boys, and the boys needed to respond to the girls' social initiations to assure their integration into the group. However, the entering boys continued to perform attention-seeking behaviors and failed to respond to the female dyadic initiations. These findings support past reviews suggesting that during children's and adults' cross-sex social interactions males respond less and interrupt more than females (Doyle, 1985; Maccoby, 1989; Wine et al., 1980).

An intriguing question that arises from the findings regards the extent to which the complementarity of the social interchanges between the entering children and the group members influenced group entry success. Although complementarity is conducive to optimal communication (Kellermann, 1987), complementarity by itself may not entirely predict group entry success. Entry success also depends on the personal dispositions of the group members (e.g., sociability) and perhaps, on other aspects of the context beyond the control of the entering children (e.g., involvement of the group members in the activity, aspects of the activity itself).

Although opposite-sex social interactions generally are less complementary than same-sex interactions, children still approach opposite-sex peers (Corsaro, 1989;

Maccoby, 1989; Phinney, 1979; Thome, 1986). The entering children requested participation from both same- and opposite-sex dyad members. However, they insisted more in their requests for inclusion when they approached same-sex than opposite-sex dyads. Past evidence that children prefer to play with same-sex peers (e.g., Hartup, 1983) suggests that the entering children may have been more eager to play the board game with the same-sex than with the opposite-sex dyad members. Also, since children generally are with same-sex peers (e.g., Thome, 1986), the entering children who entered same-sex dyads may have been less constrained due to familiarity with the social situation than those who entered opposite-sex dyads. The former children also may have felt more comfortable to redirect the group members' attention from the board game with activity-unrelated behaviors such as giving and asking personal information from the dyad members (see for example, Jormakka, 1976).

## **4.2. Understanding Group Members' Behavior Toward the Entering Children**

The group members mostly ignored or initiated social interactions toward the entering children. The high rate of group members' ignoring of the entering children also has been observed by past researchers (Corsaro, 1979; 1981; Dodge et al., 1983; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Gottman, 1981). The rate at which group members ignore the entering children and the number of social initiations they direct toward them likely reflect group members' social receptiveness. If this assumption is correct, then the findings suggest that, consistent with expectations, female group members were substantially more amiable and socially attentive to the entering children than the male group members (Block, 1976; Krasnor, 1982; Hoffman, 1977; Smye et al., 1980; Wine et al., 1980), in spite of girls' preferences for dyadic rather than triadic interactions (Waldrop & Halverson, 1975).

Contrasted with the passive social behavior of girls in the role of entering children, girls in the role of group members were socially active. The female dyad members initiated most of the conversation and invited the entering children to participate in the game. Similarly, contrasted with the active social behavior of boys when they were in the role of entering children, boys in the role of group members were socially uninterested in the entering children. These findings support the Deaux and Major (1987) proposition that males and females, even though they may be equally capable of performing similar behavior, may differ in the choices of behaviors they make when confronted with different social contexts. Thus, understanding and interpreting gender differences require assessment of the context in which they occur (Blyth, 1983; Deaux & Major, 1987; Jacklin & Maccoby, 1978; Maccoby, 1980; Maccoby & Jacklin, 1974; 1983; Rubin & Daniels-Beirness, 1983).

Although the gender of an individual is likely to influence the behavior of the co-participants in an interaction (Jacklin & Maccoby, 1978; 1983), this effect was not observed for the group members. Group members were as receptive to same-sex as opposite-sex entering children despite strong prior evidence that children consistently prefer same-sex peers (Hartup, 1983). A preference for same-sex peers may occur when children have the option of choosing between boys and girls. However, when they do not have a choice, as in the present study, any child's (boy or girl) social initiation may be equally well-received. The gender of the entering children may affect group members' responses when, for example, a boy and a girl simultaneously attempt to enter a male or female dyad. This may be an interesting research topic to pursue.

Consistent with past research, the behavior of the group members was partly influenced by the behavior of the entering children (Corsaro, 1979; 1981; Dodge et al., 1983; 1986; 1987; Putallaz & Gottman, 1981; Putallaz & Heflin, 1986; Putallaz & Wasserman, 1986). By focusing on the type of responses made by the group members to children's entering strategies it is possible to classify some behaviors of the entering

children as more risky than others. Risky entering strategies are those that increase the likelihood of negative dyadic responses (see also, Dodge et al., 1983; Putallaz & Gottman, 1981). Entering children's disagreements were risky because they decreased group members' ignoring at the expense of increases in negative responses. Other risky entering strategies were helping, inclusive behaviors, and references to the self. Although these behaviors decreased group members' ignoring and increased positive group members' responses, social initiations, and invitations to participate, they also increased the likelihood of group members' negative responses. Helping may have provoked negative dyadic responses from dyad members who were competing with each other in the board game. When dyad members were highly competitive, helping from the entering child may have pleased one dyad member and annoyed the other, which in turn, may have elicited negative interactions between the dyad members. Less competitive dyad members may have regarded helping as a cooperative action from the entering children, and therefore, reacted positively toward them. Thus, the level of competition among dyad members may influence dyad members' responses to entering children's helping behavior. Self references are direct attempts to draw the group members attention to the self. The least receptive children may have found self references disturbing, perhaps because they were focused on the board game. An assessment of the degree of dyadic involvement in the board game may help us understand group members' responses to children's self references.

The safest entering strategies involved responding to dyadic initiations, waiting, statements, questions, and demands (other than demands for participation in the board game). These behaviors ensured the positive attention of the group members without increasing the likelihood of negative responses. Presumably, group members, regardless of their social receptiveness toward the entering children, are positive toward entering children who avoid disagreeing with them, pose questions, and make statements and demands that mostly are relevant to the group's ongoing interaction, and are willing to wait and are ready to respond to the group members' initiations.

The types of responses made by group members to entering children's requests for participation in the board game were intriguing. Entering children's request for inclusion resulted in one of two conflicting responses: a direct refusal to allow the child to participate, or in an invitation to participate. Group members' personal social interest in the entering child may have accounted partly for their decision to accept or not accept the entering children's requests for inclusion, however, other factors, such as the gender and the manner in which the entering child requested participation, may have operated on these decisions as well. For example, female dyads were equally attentive to entering boys and girls, but they accepted most of the entering girls who took the initiative to request inclusion and only few of the entering boys who did so. This bias was not observed in the male dyads. It is possible that the female dyads were apprehensive toward the more assertive entering boys but were not disturbed by the assertive entering girls. Some support for these speculations comes from findings that girls may have less satisfactory interactions with dominant boys than with dominant girls. Dominant boys are uncooperative and physical, whereas dominant girls are cooperative and use verbal persuasion (Maccoby, 1989).

It also is possible that the group members' responses to entering children's requests for inclusion may have depended on subtle differences in the manner in which the entering child requested participation (e.g., a polite vs. a demanding request). In the future, researchers may wish to be more specific in their coding of inclusive behavior to assess the validity of this speculation. It is interesting that the entering children's requests for inclusion typically were followed by a dyadic invitation rather than a direct positive response. This finding is consistent with the general trend of group members to lead the conversation with the entering children rather than to 'respond' to the entering children. It seems that the group members had substantial control over the group entry process and refused to let the lead fall into the hands of the entering children.

In conclusion, group members' reactions toward entering children are greatly influenced by their own personal social receptiveness. This receptiveness may be influenced by many factors, including individual dispositions, and aspects of the social situation (e.g., competition with the other dyad member, interest in the ongoing activity) as well as by the children's entering strategies. The findings of this study clearly point to the need to focus further on the active contribution of the group members to the group entry process (see Hymel et al., in press, for a similar idea).

### **4.3. Understanding Group Entry Success**

Consistent with past research (Dodge et al., 1983; 1986; Pettit et al., 1987; Putallaz, 1983; Putallaz & Gottman, 1981; Putallaz & Heflin, 1986), children's entering strategies were important for understanding group entry success in this study. In particular, entering children's responsiveness to dyadic initiations was a good predictor of entry success (see also, Dodge et al., 1986). It makes intuitive sense that entering children who responded to dyadic social initiations were socially rewarding to the dyad members. Because successful children were responsive, they also may have maintained a coherent conversation with the group members, and therefore, learned the rules of the game faster than the unsuccessful children. Further, the most responsive children also may have been less likely to disrupt and more willing to comply with the rules of the game and with the dyad members than the least responsive children, and thus, may have been seen by the dyad members as good potential play partners.

Also consistent with past research (Corsaro, 1979; Dodge et al., 1983; 1986; Putallaz & Gottman, 1981; Putallaz & Heflin, 1986), successful children's entering strategies maintained the frame of reference of the group's ongoing activity. This finding is not surprising since, given that the group members are happily involved in the board game, inquiries or comments unrelated to the dyadic interaction may have been disruptive. Also, entering children who were focused on the board game may have implicitly

manifested their willingness to play. It is likely that the group members were aware that the future of the game as well as the stability of the group after the entering child started to play was dependent on the adherence of the entering children to the rules of the game as well as on the interdependency among the three children (Parson, 1971, cited in Doyle, 1985).

However, entering strategies that focus on the group's ongoing interaction are not always more effective than those that do not (Pettit et al., 1987). Activity-related entering strategies may be more effective when the group members are interested in the ongoing activity than when the group members are relatively uninvolved. It also is possible that when the peer group is more loosely interconnected (less cohesive), activity-unrelated behaviors may be socially effective. More research is needed to assess the factors that affect the effectiveness of children's entering strategies. A focus on variables such as group cohesiveness, the structure of the group's ongoing activity, and group members' involvement in the ongoing activity might be fruitful.

Although the outcome of group entry attempts was partly affected by the behavior of the entering children, the group members also determined the course of the group entry process and eventually, the success of children's group entry attempts. Past researchers often have neglected the active role of the group members in the group entry process. In the present study, dyadic initiations were coded in addition to dyadic ignoring, and positive and negative responses. This procedure contrasts with methods employed by Putallaz and Gottman (1981) and Dodge et al. (1983) who coded group invitations as positive group responses (Kenneth Dodge; Martha Putallaz, personal communication, December, 1987). Group initiations were not included in the Putallaz and Gottman (1981) study, and Dodge et al. (1983) examined dyadic initiations briefly and aside from the major analyses. A great deal of information about the active contribution of the group members to the group entry process is lost if group members' initiations are not considered, or if group members' invitations are classified as a positive 'response' of the

group members. Not only were dyadic initiations frequent, but they also were the best predictors of entry success. Invitations, in particular, accurately predicted entry success and accounted for over two thirds of the total success cases.

A plausible explanation for the strong role of the group members in determining the success of the group entry attempts is that the group members had more power over the situation than did the entering children. The dyad members were in the room previous to the entrance of the entering children, they knew how to play the game, and their social interactions were focused on and maintained by playing the board game. In contrast, the entering children were in a state of dependency upon the dyad members. The dyad members could have simply said (and in many occasions they did) "No you can't play, the lady did not say so". Thus, the ability of the entering children to behave 'competently' may have been less important for the eventual outcome of the group entry attempt than the willingness of the dyad members to include the entering children in the game.

There were important gender differences in dyadic social initiations toward the entering children. Female dyads were substantially more socially attentive and amiable than the male dyads. However, this gender difference by itself is unable to account for the higher success rate of entering girls than entering boys during attempts to enter female dyads. Recall that the female dyads were equally attentive regardless of the gender of the entering children. There are two competing hypotheses that can explain the relation between entry success and the gender of the entering children and the group members. One possibility is that the relation between entry success and gender is mediated by the group members' social preferences for same-sex entering children: regardless of their behavior (Martin, 1989). There is substantial evidence that gender, race, physical appearance, and even names strongly affect children's social preferences (Bruning & Husa, 1972; Dion & Berscheid, 1974; Gotlieb & Leyser, 1981; Hallinan, 1981; 1986; Lemer & Lemer, 1977; Schofield, 1981; Vaughn & Langlois, 1983; Kleck, Richardson,



& Ronald, 1974). A preference for same-sex peers may be the result of perceived similarity among children (Duck, 1977). In support of this suggestion, there is evidence that children tend to become friends with children similar to themselves in age, sex, race, ethnolinguistic background, sociability, values, and interests (Asher et al., 1977; Hartup, 1979; Singleton & Asher, 1979). Since same-sex children share similar physical features, values, and interests (Spence, 1986), same-sex group entry attempts would be expected to be more successful than opposite-sex group entry attempts. The findings, however, are somewhat inconsistent with this hypothesis since the behavior of the group members toward the entering children was not affected by the gender of the entering children, and since entering boys and girls were equally successful during entry into male dyads.

Another explanation for the relation between entry success and the gender of the entering children and the group members is that gender differences in the behavior of both entering children and group members accounted for group entry success. Successful children were more responsive to dyadic initiations than unsuccessful children, and girls were more responsive than boys. Dyadic social initiations also predicted entry success, and female dyad members initiated more social interactions toward the entering children than did male dyad members. The greater responsiveness of the entering girls together with the higher proportion of female dyadic initiations and invitations resulted in the high success rate of girls entering female groups.

If the entering children's responsiveness to dyadic initiations predicts success during entry attempts into male dyads as well as during entry attempts into female dyads, however, then the least responsive children, that is, boys entering female dyads, should have been the least successful. This was not the case. It is possible that children who attempted entry into female dyad members only needed to respond to the dyadic initiations to be successful and did not need to attract the dyad members' attention. In contrast, attempts to enter male dyads may have required more attention-getting strategies than attempts to enter female dyads because dyadic initiations occurred less

often from the male than the female dyads. These speculations are supported by the fact that during entry attempts into male dyads, entering boys, who were less responsive but more active, were not less successful than entering girls, who were more responsive but less active. Indeed, there was a trend for boys to be more successful than girls during entry attempts into male dyads. Thus, entering children's responsiveness to dyadic initiations was a key element of success during attempts to enter female dyads, whereas both active entering strategies and responsiveness were necessary for success during group entry attempts into male dyads.

#### 4.4. Summary

Important variations of the processes conducive to success were observed for boys' and girls' attempts to enter male and female dyads. When boys attempted entry into male dyads, the group entry attempt was characterized by an active and inquisitive but unresponsive boy and a relatively inattentive dyad. In about a third of the cases the male dyads invited the entering boys to play the game shortly after their arrival. In the rest of the cases, the entering boys took the initiative and requested inclusion. To be successful, entering boys were required both to perform attention-seeking entering strategies and to respond to the social initiations from the male dyads. Only half of the boys who entered male dyads ended up playing the board game.

In contrast, when girls entered female dyads, they encountered a friendly dyad who initiated most of the interactions. The entering girls typically were quiet and ready to respond to the social initiations from the female dyad members. In over half of the cases the female dyad members invited the entering girls to play the game shortly after their arrival; otherwise, the entering girls took the initiative to request inclusion. To be successful, the entering girls needed to be responsive to the female dyadic initiations. Almost all of the girls who entered female dyads ended up playing the board game.

When boys attempted entry into female dyads, the process typically consisted of an entering boy and a female dyad who both were active, inquisitive, demanding, and socially interested in each other. Nevertheless, they were not actually involved in a coherent conversation, since neither of them were likely to respond to each other's social initiations. In over half of the cases the female dyad members invited the entering boys to participate shortly after their arrival. In the other half of the cases, the entering boys requested participation but were mostly unsuccessful. Because the female dyads initiated most of the conversation, to be successful, entering boys mostly needed to be responsive to the female social initiations. Only half of the boys who entered female dyads ended up playing the board game.

During girls' entry attempts into male dyads, entering girls generally were quiet and attentive to the male group's ongoing interaction, and the male dyad members typically ignored the entering girls. In about one third of the cases the male dyad members invited the entering girls to participate shortly after their arrival. Although entering girls were inhibited, the ones who were not invited by the male dyads did request inclusion. As was the case for boys entering male dyads, to be successful, entering girls needed to perform attention seeking behaviors and to respond to the social initiations of the male dyads. Only half of the girls who entered male dyads ended up playing the board game.

Thus, to achieve success when the dyad members were socially attentive, the entering children needed mostly to respond to the dyad members' initiations. In contrast, to be successful when the dyad members were socially inattentive, the entering children needed to first attract the positive attention of the dyad members, and then respond to their social initiations. Since the female dyad members were more socially attentive than the male dyads, and since the entering girls were more responsive than the entering boys, entering girls were more successful than the entering boys when they entered female dyads. However, because entering girls were less likely to perform attention-seeking entering strategies than boys, the entering girls were not more successful than the

entering boys during their attempts to enter male dyads despite the entering girls' social responsiveness. Also, because the entering boys were less responsive than the entering girls, they were not more successful than the entering girls in their attempts to enter either male or female dyads despite their attention-seeking behavior. These findings are consistent with past observations that girls make friends more easily than boys (Hagglund, 1986), a pattern that extends to adulthood (Miller, 1983). They also support past reviews suggesting that interactions among girls are more positive and cooperative than interactions among boys and that cross-sex interactions are difficult and unstable (e.g., Hagglund, 1986; Maccoby, 1989).

## **4.5. Practical and Methodological Implications of the Findings**

One implication of the finding that the entering strategies that lead to success vary for girls' and boys' same- and opposite-sex group entry attempts is that behavior cannot be defined as socially 'competent' without reference to the individuals and the context of the interaction (see also, Allen, Weissberg, & Hawkins, 1989; Dodge, 1985; Putallaz & Wasserman, 1989). Thus, the research issue is not whether behavior is competent or incompetent, but which behavior under which circumstances is effective. From a practical standpoint, clinicians interested in applying research findings to social skills training programs also might wish to consider that individual characteristics such as sex, age, physical handicaps, and ethnicity constitute an aspect of the social context, and therefore, differences may exist in the behaviors expected to lead to competent performance for groups of boys, girls, children of different ages and cultures, and children from special populations (see for example, Hops & Finch, 1985; Schneider & Byrne, 1985; Putallaz & Wasserman, 1989).

Another important implication of the findings is that group members must be considered as active contributors to the group entry process (Allen, 1981; Hymel et al., in

press). A practical consequence of this assumption is that clinical interventions directed to help children's integration into peer groups may need to be extended to involve group members. Traditionally, social skills training programs target the children who experience rejection from their peer groups. The peer group, however, also can be taught to become more flexible and open to the target children (Bierman, 1986; Bierman & Furman, 1984; Blyth, 1983). Interventions involving the peer group may be particularly important when the group members are biased against particular characteristics of the target individual (e.g., race, physical handicaps, gender) or when the peer group is difficult to penetrate (Allen, 1981; Dion & Berscheid, 1974; Gottlieb & Leyser, 1981; Hallinan, 1981; 1986; Langlois & Stephan, 1977; Schofield, 1981).

A methodological implication of the findings is that group members' negative responses to the entering children did not predict the success or failure of the group entry attempts (see also Corsaro, 1979). Negative responses to the entering children's behavioral strategies thus may not be the best index of behavioral effectiveness. Kellermann (1987) suggests that verbal interchanges may be affected by the immediate behavior of the participants in the interaction and may not always reflect the overall goal of the interaction. Group members' negative responses may be provoked by preceding disagreements of the entering children but may not necessarily reflect a lack of social receptiveness on the part of the group members. Similarly, group members' positive responses may not necessarily reflect a willingness of the group members to integrate the entering children in the group's ongoing interaction. As Kellermann (1987) states "actors respond not only in accordance with what they personally want but also in accordance with interactional constraints" (pp. 197). Clearly, there is a need to consider the difference between actual group entry success and group members' positive responses to the entering children when making judgments about the effectiveness of entering strategies.

## **4.6. Directions for Future Research**

### **4.6.1. Focusing on the Group Members' Behaviors**

Perhaps the most interesting finding of the present study was that the group members were important contributors to group entry processes and outcomes. Several questions about the role of the group members in the group entry process remain for future research. For example, by observing further the quality of the social interactions between the group members, it might be possible to understand the underlying factors accounting for the nature of the group members' responses to the entering child. The effect of group cohesiveness, group members' perceptions of the entering child, and disenchantment between group members on the group entry process might be particularly interesting to study. Information of this kind may highlight some internal processes accounting for group members' social receptiveness to the entering children.

The extent to which the group members are affected by entering strategies and their own personal dispositions can be assessed further by systematically manipulating the entering children's behavior. Putallaz (1983) used group members who were her confederates to observe the entering strategies used by popular and unpopular children during specific social situations presented by the group members. Using a similar methodology, entering children who are trained by the experimenter could be used to study group members' behavioral variations as a function of the entering child's behavior.

### **4.6.2. Individual and Contextual Factors Influencing Entering Children and Group Members' Behaviors**

In this study I have shown that the group entry process is the result of individual and contextual factors that together specify whether or not certain behaviors will lead to entry success. I selected gender and behavior as exemplars of individual and contextual factors

implicated in the group entry process. Other individual and context effects likely to affect group entry are the familiarity among children, the characteristics of the group's ongoing activity, the group members' interest in the group's ongoing activity, the age of the children, and the size of the group to which the entry attempt is directed. A brief introduction to how some of these variables may affect the group entry process follows.

#### **4.6.2.1. Familiarity**

Acquaintanceship among children is an important factor to consider when social interactions are observed (Doyle, Connolly, & Rivest, 1980; Masters & Furman, 1981; Gottman, 1983; Feldbaum et al., 1980). In general, the evidence suggests that children's attempts to enter groups of friends are characterized by more active behavior on the part of the entering children and by greater receptivity on the part of group members than attempts to enter groups of strangers (Corsaro, 1981; Feldbaum, et al., 1980; Jormakka, 1976).

The familiarity among children also can affect the saliency of gender as a social category variable. Deaux and Major (1987) suggested that the less familiar individuals are with each other, the more likely it is that gender becomes a salient feature affecting the behavior of the co-participants in an interaction. This occurs because of the limited amount of information individuals have about each other. When less information is available, the gender of the co-participant becomes a useful marker associated with gender-related behaviors, beliefs, and expectations (Spence, 1985). Once gender schemas are activated, actions may be channeled by these schemas (Darley & Fazio, 1980). Thus, differences in the familiarity among children may change some of the processes characterizing children's attempts to enter opposite-sex peer groups.

#### **4.6.2.2. Characteristics of the Group's Ongoing Activity**

Allen (1981) suggested that to have a complete understanding of the group entry process, researchers need to pay particular attention to the task in which group members are involved. Success may differ for attempts to enter a group of peers that is involved in

highly structured and single-goal tasks, such as playing a card game, than for attempts to enter into a group of peers that is involved in less structured tasks in which several individual goals are possible such as when children play with blocks, sand, or playdough. In the latter instance, entering children would be less likely to disrupt the group's ongoing activity and can simply join in by behaving in similar ways to the group members (e.g., start constructing a sand castle of their own). The fact that Corsaro (1979) observed children's entry attempts into peer groups that were involved in non-structured tasks explains the effectiveness the authors attributed to children's strategies such as non-verbal joining in and behavior that resembles that of the group members. When group members are involved in structured and single-goal tasks such as playing a board game, the entering child may find it difficult to simply join in and start playing the board game without disrupting the game. The effect of the group's ongoing activity on the entry process is an important question that needs to be addressed in future investigations.

#### **4.6.2.3. Group Members' Interest in the Group's Ongoing Activity**

In the present study, although the activity in which group members were involved was constant, there were gender differences in group members' willingness to interrupt the board game in order to attend to the entering child and to let her or him participate. This finding can be accounted for by possible gender differences in the dyad members' involvement in the board game. Zarbatany, Rankin, and Hartmann (1988) observed that children's expectations for peer behavior are affected by the activity in which they are involved, and that boys and girls have different preferences for certain activities. Hence, gender differences in children's behavior while involved in a similar activity may be affected by boys' and girls' different interests in that particular activity. For example, since males prefer competitive games and tend to be more competitive than females during games that call for competitive behavior (e.g., Cronin, 1980; Lever, 1976), it is possible that in this study the male dyad members were more interested and focused on



the board game than the female dyad members. Thus, the male dyad members may have been more likely to ignore the entering child and less willing to suspend the game in order to initiate interactions toward the entering child than the female dyad members. Also, the male dyad members may have regarded the newcomer as a to-be-competitor who was easily eliminated by not letting her or him play. The effect of the group members' involvement in the group's ongoing interaction is an interesting research topic for future investigation.

#### 4.6.2.4. Age

Past research suggests that the group entry process is likely to differ for children across the development cycle (Bierman, 1986; Blyth, 1983; Putallaz & Wasserman, 1989; Whitting & Whitting, 1975). Developmental changes have been observed in children's social goals, reasons for interacting with peers, relationship expectations, solutions to hypothetical social situations, and actual social behaviors (Boggiano, Klinger, Main, 1986; Coie et al., 1982; Corsaro, 1979; Renshaw & Asher, 1983; Selman, 1980). Blyth (1983) noted that even the desire to enter peer groups may vary with development. Thus, age variation in the group entry processes is likely. Indeed, Putallaz and Wasserman (1989) found that first graders were more likely than fifth graders to perform entering strategies unrelated to the group's ongoing activity, and that the younger group members were more likely to respond positively than to ignore them, whereas the older group members were equally likely to respond positively or to ignore them. Similarly, Corsaro (1979) found that three-year-old children performed more aversive-disruptive behavior during social initiations toward a peer group than four-year-old children. The difference in the age of the children observed in this study with those observed in the Corsaro's study may account for the absence of aversive-disruptive entering strategies in our older sample.

The ability of children to establish a common activity with peers improves with age (Gottman, 1983), and therefore, forming and maintaining a peer group may be more

difficult for preschool than elementary-school-aged children. The arrival of a new child can thus be more threatening to groups composed of younger than older children and hence, the younger group members may be less receptive than older group members to newcomers. Also, since preschool-aged children are less accurate than elementary-school-aged children in taking the perspective of others (Selman, 1980), the younger children may fail to consider the needs of the group members, and therefore, may frequently disrupt group members' ongoing interaction (see for example, Corsaro, 1979; Putallaz & Wasserman, 1989). Thus, younger children's group entry attempts may be rebuffed more frequently than older children's group entry attempts. The low rate of entry success observed by Corsaro (1979) during the group entry attempts of nursery-school-aged children relative to the success rate observed in the present study supports this speculation. Thus, developmental differences in group entering strategies and the ease with which peer groups can be formed may account for group members' behavior toward newcomers as well as for the success of children's group entry attempts.

The group entry process also may be affected by interactions between age and gender (Putallaz & Wasserman, 1989). Preschoolers interact with opposite-sex peers more often than do elementary-school-aged children (Bianchi & Bakeman, 1978; Garvey & Bendebba, 1974; Hartup, 1983; Langlois, Gottfried, & Seay, 1973; Thome, 1986). Therefore, groups composed of preschool-age children may respond more positively to opposite-sex entering children than groups composed of elementary-school-aged children. Corsaro (1981) found that nursery-school-aged girls were rebuffed more frequently by male groups than boys were by female groups, whereas Thome (1986) found that elementary-school-aged boys were rebuffed more frequently by female groups than girls were by male groups. It also is likely that the success of opposite-sex group entry attempts might be particularly high during adolescence when children are actively seeking opposite-sex interactions. As suggested by Putallaz and Wasserman (1989), the research on group entry would profit substantially from a developmental perspective.

#### **4.6.2.5. Group Size**

Another factor that may influence the group entry process is the number of children comprising the group (Allen, 1981; Foster, DeLawyer, & Guevremont, 1986; Hare, 1976; Putallaz & Wasserman, 1989). Putallaz and Wasserman (1989) found that group size affected entering children's behavior and group members' responses. During children's attempts to enter dyads and triads, passive entering strategies such as waiting and hovering were common, whereas during one-on-one social initiations it was more typical for approaching children to perform behaviors that were unrelated to the other child's ongoing activity. These authors also found that compared to dyads and triads, one-on-one social initiations were the most positively accepted. Triads were more likely to reject children's entry attempts than dyads.

Corsaro (1981) observed that overcrowding was one of the reasons for which group members rebuff children's entry attempts. In the present study, the board game permitted the addition of children without serious consequences for the ongoing competition, and thus, overcrowding may not explain why some group members did not let the entering child play the board game. However, if the group members were involved in a situation that did not allow for additional playmates (e.g., a board game for two), the probability that the group members would let the entering child participate would likely be reduced.

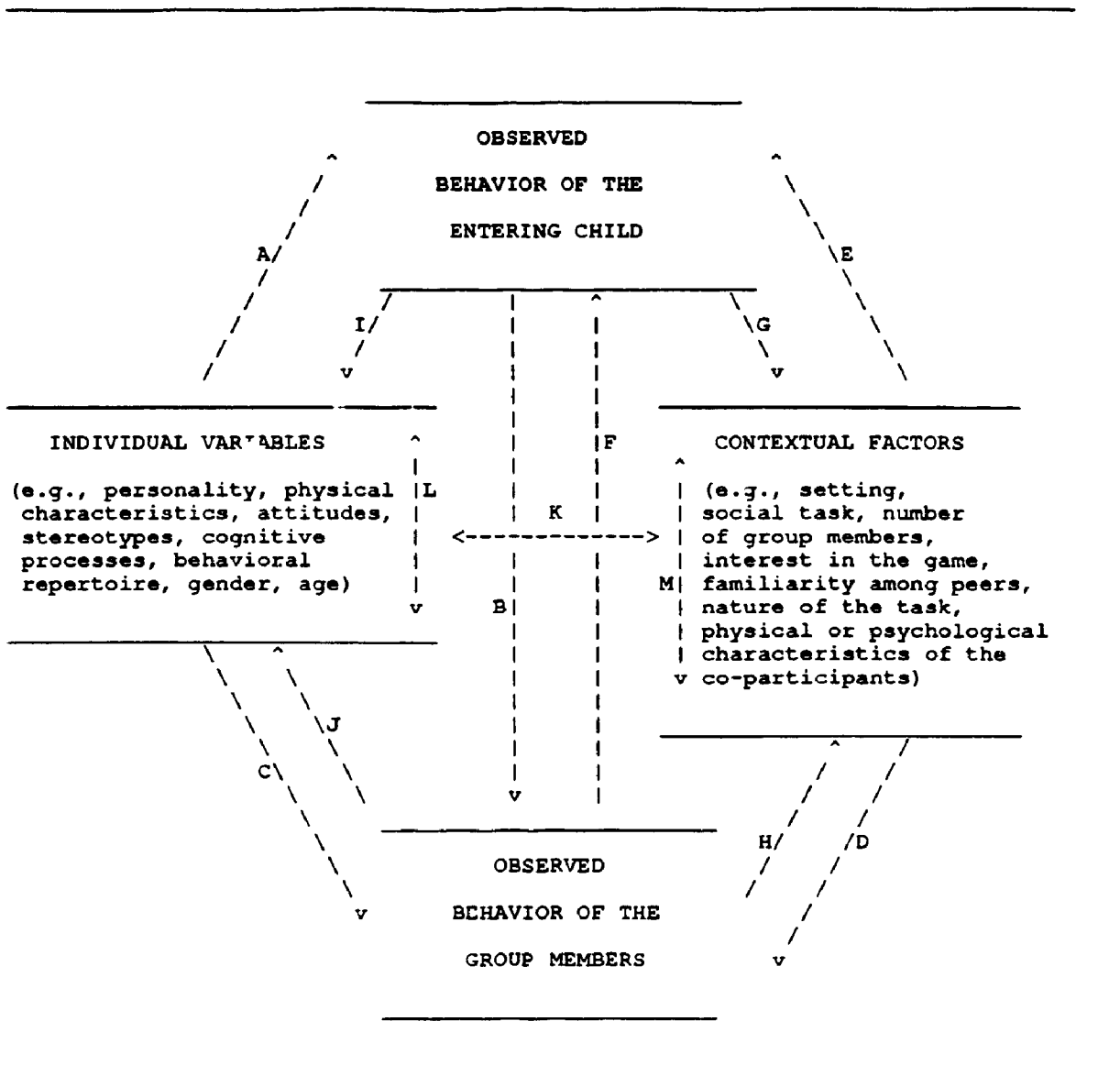
There is some evidence that gender differences exist in the number of children composing male and female groups. Female groups are smaller than male groups (Hagglund, 1986; Waldrop & Halverson, 1975). Groups of males and females may differ in their response to children's group entry attempts on the basis of a gender-related definition of 'overcrowding'. Thus, the outcomes of children's group entry attempts may depend on whether or not the addition of a new child disrupts the balance of the group members' interaction, which in part may be predictable from the number of children in the group as well as from gender differences in children's preference for groups of certain dimensions. Clearly, a focus on the effect of group size on group entry may be profitable.

### **4.6.3. Ecological Validation**

Researchers' awareness of the influence of individual and contextual factors on the group entry process has resulted in a preference to observe the group entry phenomenon in constrained social settings in which individual variables, such as age, gender, and popularity status; and some aspects of the context, such as the number of group members, the activity in which group members are involved, and the familiarity among children have been controlled (Dodge, 1985; Dodge et al., 1983; 1986; Gottman, 1977; Pettit et al., 1987; Putallaz & Gottman, 1981; Putallaz, 1983). The merit of observing children's group entry attempts in laboratory settings is that the researcher can systematically assess the effect of individual and contextual variables on group entry processes. However, it is important that future researchers assess the extent to which the findings of studies obtained from observations of group entry attempts in laboratory settings replicate in naturally-occurring children's attempts to enter peer groups (Pettit et al., 1987; Putallaz & Wasserman, 1989).

## **4.7. Toward a Model of Group Entry Processes**

The model presented in Figure 4-1 is an extension of the models of group entry proposed by Dodge et al. (1983) and Putallaz and Heflin (1986). These researchers suggested that the behavior of the entering children is the result of their cognitive ability to recognize the social situation and to act accordingly (arrow A). A relation between personal dispositions and entering strategies is additionally supported by evidence that personality, age, and gender account for entering children's behavior during group entry attempts (Coie & Kuppertsmidt, 1983; Corsaro, 1979; 1981; Dodge et al., 1983; 1986; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Gottman, 1981; Putallaz & Wasserman, 1989). However, the results of this study indicate that the behavior of entering children also is influenced by other factors such as the gender and the behavior of the group members (arrow E and F).



**Figure 4-1: A Model of Group Entry from an Ecological Perspective**

Dodge's and Putallaz' and Heflin's models also suggest that the behavior of the group members is a direct response to the behavior of the entering children (arrow B). However, the present findings indicate that children's entering strategies are only one factor influencing the behavior of the group members (see also Putallaz & Wasserman, 1989). Group members' responses also are the result of their own personal dispositions and the context of the interaction (arrows C and D). Although the findings of this study did not support the relation between the gender of the entering children and the behavior of the group members, other evidence points in this direction (Corsaro, 1979; Phinney, 1979; Phinney & Rotheram, 1982; Putallaz & Wasserman, 1989). Further, there is evidence that individual characteristics such as physical appearance influence the behavior of the co-participants in an interaction (Hallinan, 1981; 1986). Thus, a more complete model of the entry process includes the effects of individual variables on both the entering child and the group members, the effects of contextual factors on the behavior of both the entering child and the group members, and the reciprocal effects between the behavior of the entering child and the group members.

The above relations describe the processes occurring at a given instant of the group entry process. The continuing process is described by arrows G, H, I, J, K, L, and M. The model assumes that individual variables are not static but are continually developing in interaction with the context (arrow K), the behavior of the co-participant (arrows I and J), and through reciprocal relations among variables within the individual (arrow L). For example, stereotypes, attitudes, cognitive processes, and behavioral repertoire affect each other reciprocally and are transformed by additional experiences with other individuals and aspects of the context. Similarly, although some aspects of the environment may be static (e.g., room arrangement), other aspects of the environment are continually changing as a result of the behavior of the entering child and the group members (arrows G and H) as well as from interrelations among variables within the context itself (arrow M). For example, familiarity among children increases with the interaction among

children while the social task changes with the nature of the activity, the familiarity among children, and the number of group members.

The current information that is available in the area of group entry does not yet permit a greater specification of how the variables may combine to produce different outcomes. Nevertheless, the model can serve as a useful guide for future research. Investigators may wish to assess the saliency of one variable relative to the other variables. It seems reasonable to assume that a variable that is salient within a given social situation (e.g., race within a racist group, gender for highly gender-stereotyped individuals) would predict entry success better than variables which are less salient in that same context (e.g., entering strategies). An underlying assumption of the model is that the relations among the variables in the model are flexible. To refine the model, more research is needed that systematically studies the manner in which personal and contextual factors interact. Also, since the model was generated on a post hoc basis it needs independent verification.

## 4.8. General Conclusions

The group entry process was approached in this study from an ecological perspective that stresses the role of both entering children and group members as well as the combined effects of individual and contextual factors. The findings suggest that the process by which children negotiate entry into peer groups is different for boys' and girls' group entry attempts into male and female dyads. The success of group entry attempts is the result of complex relations among gender differences in entering strategies and group members' receptiveness. Both the entering children and the group members actively contribute to the group entry process.

# Appendix A

## Coding Systems to Classify the Behavior of the Entering Children

### Primary Coding System

Entering children's behaviors were coded in terms of behavioral units. A behavioral unit consisted in a sentence with a content defined by the coding system (Bakeman & Gottman, 1986). In cases in which the same behavioral unit was repeated consecutively (e.g., "I want the blue, want the blue, yes blue"), the consecutive behaviors were summarized in one unit.

The coding system was used in sequential order, that is, if a behavior was classified by an earlier code, it was not classified by a later code, even if the later code also could be applied. The coding system was arranged such that behaviors which had a qualitative or subjective connotation (e.g., aversive, mimicking, comparisons, helping) appeared earlier in the coding system whereas behaviors that were classified in a more formal than a qualitative manner (e.g., questions, demands, statements) were included later in the coding system. The rationale was that behaviors containing a qualitative content should be coded separated from those in which the formal content was of interest because the qualitative value of the behavior was likely to be more salient than the formal manner in which it was presented. For example, an aggressive statement was coded as an aversive behavior and not as a statement because the aversive content was likely to elicit a dyadic behavior that was more likely to be a response to the content than to the formal use of a statement.

Coders classified the entering children's behavior into one of ten exhaustive and mutually exclusive codes:

**Aversive**. This code consists of verbal or non-verbal behavior which disturbed (e.g., did not let the children play) or aggressed against the dyad members (e.g., pushing, hitting, insulting). Similar to the 'Disruption' code used by Dodge et al. (1983).



**Response.** This code classifies entering children's appropriate (e.g., non-aversive and contingent with the dyadic request) response to preceding dyadic requests. When a preceding dyadic request is followed by the entering children waiting (e.g., entering child does not respond but continues to observe the dyad members), this behavior of the entering child was coded as waiting. Similarly, when a previous dyadic request is followed by an independent behavior performed by the entering children (e.g., instead of responding to a previous dyadic question, the entering child follows the dyadic question with another question), the behavior of the entering child is coded with the corresponding code (i.e., "question").

**Mimic** This code consists of verbal and non-verbal behavior that echoes a preceding dyadic behavior (e.g., a dyad member says "Don't" and the entering child says "Don't"; a dyad member performs a physical movement which is subsequently imitated by the entering child). **Exception:** When the entering child repeats the same word or phrase but with a different connotation (e.g., dyad member says "No!" and entering child says "No?").

**Comparison** This code consists of verbal behavior that compares children or that requires comparison among children (e.g., "Who is winning?", "S/he is ahead of you", "S/he is getting closer").

**Help** This code consists of verbal or non-verbal behavior that can be identified as assisting, aiding, or supporting a dyad member (e.g., giving a response required for the game, spinning the needle used for the board-game, picking up the die from the floor, moving the piece on the board in place of a dyad member).

**Inclusion.** This code consists of verbal or non-verbal behavior that directly or indirectly requests, suggests, or demands participation in the game (e.g., locating one's piece on the board game, taking a turn in the game, "Can I play?", "When am I playing?", "My turn", "I'll go second", "I am suppose to play", "What color am I?", "Am I suppose to play?", "Let's start over", "Where do I start?").

**Agree.** This code consists of verbal or non-verbal behavior that implies an agreement with what dyad members are doing or saying (e.g., "yeah", "that is right", clear head nodding implying agreement with another child, "OK"). It also includes complimentary behavior (e.g., "That was a good answer", "I like that").

**Disagree.** This code consists of verbal or non-verbal behavior that implies disagreement with what the dyad members are doing or saying (e.g., "that is not right", moving head from side to side clearly implying disagreement, "don't say that", "... is not an animal", "I don't think so").

**Self Referent.** This code consists of statements, demands or questions that use personal pronouns ('I', 'me') in order to request attention to the self or inform about the child's wishes, feelings, or past experiences (e.g., "I'll go second", "It is my turn", "I know one", "look [at me]", "I like this game", "I like that one", "I want to play", "I am bored"; "My name is ...", "My brother starts with that letter", "I have one at home", "What am I doing here?"). This code is similar to that used by Dodge's et al. (1983) and by Putallaz' and Gottman (1981) 'me' bids.

**Question.** This code consists of statements in form of questions soliciting responses from dyad members (e.g., "What are you doing?", "Your name is John, right?", "That is orange, isn't it?", "How do you play?", "Where is the lady?"). This code is similar to that used by Putallaz & Gottman (1981) and Dodge et al. (1983).

**Demand.** This code consists of verbal or non-verbal non-aversive behavior that explicitly demands a response from or imposes a wish on dyad members (e.g., "Come on!", "Go!", "Don't!", "Pick it up", "Give me!" "hey! Stop!", a physical action performed to stop a dyad member's action). This code is similar to the Dodge et al. (1983) 'Attention Getting' tactic but includes behavior which is explicitly demanding a behavior from the dyad members.

**Statement.** This code consists of general statements (e.g., "You missed one", "This is your turn", "That is a microphone", "The lady is watching us", "This game is boring"). It also includes exclamations (e.g., "Again!", "six!", "Yeah!") and greeting behaviors.

**Waiting.** This is the only behavior that requires timing. Behavior consists of periods of over three seconds in which the child is mostly quiet and attentive to the dyad members' ongoing interaction while the dyad members are not directing their actions toward the entering child. This code is similar to the Dodge et al. (1983) 'wait and hover' tactic.

**Other.** This code consists of verbal or non-verbal behavior that observers find difficult to classify. Additionally, this code is used to summarize the behavior occurring while children behave out of the context of the board-game (e.g., children leave the table, play with objects in their surroundings).

### **Double Coding System to Classify Entering Children's Behavior**

The behavior of the entering children (except for responses to dyadic initiations) also was classified as activity related or activity unrelated. Verbal behavior which was directly or indirectly related to the board game was classified as activity-related (e.g., "Can I play?", "I have a game like that at home", "You are winning"). Verbal behavior which was not directly or indirectly related to the board game was classified as activity-unrelated (e.g., "The lady is watching us", "That is a camera", "What am I doing here?", "Why are we in here?", "Did you come a long time ago?").

# **Appendix B**

## **Coding System to Classify Group Members' Behavior**

The behavior of the dyad members was coded only in reference to the entering child. That is, behavior of the dyad members that was directed to one another was not considered. For every behavior of the entering child that was coded, observers also coded the behavior of the dyad members which began within ten seconds after the entering child performed her or his behavior. An exception to this rule occurred when a dyadic response began after ten seconds of the entering child's behavior but could be directly associated with the preceding behavior of the entering child. Using Putallaz and Gottman's (1981) procedure, the behavior of both dyad members was treated as though it was from one child. Unless both dyad members ignored the entering child, the behavior of the dyad member who did not ignore the entering child was coded.

In cases in which the entering child produced consecutive behaviors with no chance for a dyadic response in between these behaviors, the dyadic behavior after each of the entering child's behaviors was coded as 'other'. However, when the observer could associate an individual dyadic response to an individual behavior from a preceding set of consecutive entering children's behaviors, then, that dyadic behavior was coded as following the correspondent behavior of the entering child. For example, if the entering child says consecutively "What are you doing, can I play?" and the dyad members respond "No", the entering child's question "What are you doing" is followed by a dyadic behavior coded as "other" whereas "Can I play?" is followed by a dyadic behavior coded as "negative". In cases when an entering child's behavior was followed by consecutive dyadic behaviors, (e.g., "Can I play?" followed by "Yes, what is your name?"), the entering child's question ('Can I play?') was followed by both a dyadic behavior coded as "positive" (i.e., "Yes") and a dyadic behavior coded as "initiation" ('What is your name?').

The following exhaustive and mutually exclusive coding system was used to classify the behavior of the dyad members:

Positive. This code consists of dyadic behavior that does not request further action from the entering child and that is a satisfactory reply to a previous entering child's request. This code also consists of positive comments about the child or the child's previous remark (e.g., E: "Can I play" followed by D: "Yes" or "After my turn").

Negative. This code consists of dyadic behavior that does not request further action from the entering child and that is an unsatisfactory reply to a previous entering child's request (e.g., The entering child says "Can I [play, watch, tell me how you play]?" and the dyad members respond "No" or "Go away!"). This code also includes negative comments about the entering child or the entering child's previous remark (e.g., entering child provides an answer to the game and dyad members respond "That was a stupid answer" or "I don't like you").

Ignore. Once a behavior of the entering child is coded, the subsequent behavior of the dyad is coded as ignore when there is no apparent response to the entering child. Passing looks from dyad members to the entering child are considered as ignoring unless the look is direct and maintained for over three seconds. Dyadic behavior while the entering child is waiting is coded as ignore if there is no dyadic behavior directed toward the entering child during the entire waiting period.

Initiation. This code consists of dyadic behavior that requests an action from the entering child (e.g., "Ask the lady", "Do you know how to play?", "Wait", "Grab a chair", "Sit over here", "Watch us first"). Invitations to the entering child to participate are a special case of dyadic initiations (e.g., "What color do you want?", "Are you playing?").

Other. This category is used when coders are ambivalent with respect to the manner in which the behavior of the dyad members can be classified. This code also is used when a dyadic behavior cannot not be classified as either positive or negative (e.g., entering child says "I have a game like this at home" and a dyad member says "me too").

**This behavioral category includes cases in which responses of the dyad members to the entering children are conflictive (e.g., one dyad member's response can be classified as positive while the other dyad member's response can be classified as negative). In order to keep the code "ignore" unambiguous, instances in which the dyad members maintained direct eye contact with the entering child lasting for more than three seconds or other non-verbal behavior (not classifiable as positive or negative) which implied dyadic attention to the entering child were also included in this category. This code also summarized dyadic behavior that was out of context of the board game (e.g., dyad members discontinued to play the board game, or performed out-of-context behavior lasting for over three seconds).**

# Appendix C

## Correlations Among Behaviors of the Entering Children and Group Members

	Mimic	Wait	Question	State	Demand	Help	Respond	Compare	Disagree
Wait	- .17								
Question	+ .01	- .26							
State	+ .20	- .38*	- .03						
Demand	+ .04	- .21	- .06	+ .02					
Help	+ .35	+ .11	- .00	+ .09	+ .00				
Respond	- .23	- .16	- .07	- .24	- .12	- .35			
Compare	+ .20	+ .01	- .01	+ .14	- .04	+ .27	- .22		
Disagree	+ .07	- .14	- .02	+ .09	+ .10	+ .03	- .19	+ .01	
Agree	+ .42*	- .24	+ .16	+ .05	+ .00	- .01	- .16	- .03	+ .16
Self Ref.	+ .12	- .22	+ .03	+ .01	+ .16	+ .03	- .30	- .04	+ .09
Inclusive	- .06	- .08	- .04	- .04	- .13	- .18	- .11	- .10	- .10
Act. Rel.	- .03	- .43*	+ .30	+ .51*	+ .00	- .06	- .10	+ .16	- .07
Act. Unrel.	+ .18	- .36*	+ .31	+ .35	+ .21	- .02	- .37	- .12	+ .41*
Dyad Posit.	+ .12	- .00	+ .12	+ .11	+ .10	+ .13	- .16	+ .13	+ .05
Dyad Negat	+ .12	- .21	+ .12	+ .13	+ .05	+ .05	- .22	+ .07	+ .37*
Dyad Ignore	+ .24	+ .38*	+ .03	+ .21	- .06	+ .51	- .50	+ .33	+ .03
Dyad Intc.	- .07	- .17	+ .05	- .23	- .13	- .12	+ .32	- .17	- .13

(Table continues)

	Agree	Self	Inclus.	Act. Rel.	Act. Unr.	Dyad Pos.	Dyad Neg.	Dyad Ign.
Self	+ .19							
Inclusive	+ .07	+ .43*						
Act. Rel.	-.04	+ .05	+ .06					
Act. Unrel.	-.39*	+ .47*	+ .33	-.02				
Dyad Posit.	-.01	+ .31	+ .28	+ .02	+ .23			
Dyad Negat.	+ .02	+ .38*	+ .18	+ .08	+ .35	+ .05		
Dyad Ignore	+ .06	+ .14	+ .01	-.00	+ .09	+ .22	+ .10	
Dyad Intl.	-.06	-.06	-.00	-.01	-.25	-.13	-.08	-.45*

Note. Tests of significance were performed using the usual T statistic with (n-2) degrees of freedom. Using the Bonferroni approach, \*  $p < .0003$ .



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