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The battleground in kindergarten: a contrast between pretend aggression and real aggression in a full-day kindergarten classroom

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The battleground in kindergarten: A contrast between pretend aggression and real aggression in a full-day kindergarten classroom

by

Heidi Lin Malloy

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

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For the Graduate College
# TABLE OF CONTENTS

**LIST OF FIGURES**

vi

**LIST OF TABLES**

vii

**CHAPTER 1. BACKGROUND AND PURPOSE**

1

**CHAPTER 2. LITERATURE REVIEW**

7

- Rationale and Theoretical Framework
  7
- Developmental theories
  8
- Sociopolitical theories
  9
- Childhood Aggression
  11
  - Definition of real and pretend aggression
  16
- War Play and Childhood Aggression
  18
  - War play is almost exclusively a boy's activity
  18
  - The effect of televised violence on children's play
  20
  - The effect of war toys on children's play
  26
  - Acting out war themes in dramatic play
  33
  - Options for early childhood educators
  41
- Factors Associated with Aggression and Children's Play
  48
  - Gender differences in aggression
  48
  - Developmental change in patterns of aggressive behavior
  49
  - The relationship between aggression and socioeconomic status
  50
  - The effect of aggression on peer relationships
  51
  - The effect of teachers on children's aggression
  55
- Summary
  59

**CHAPTER 3. METHODS**

62

- Design
  62
- Assumptions
  64
- Limitations
  64
- Trustworthiness
  65
- Participants
  66
- Setting
  67
- Procedures
  67
- Instruments
  69

**CHAPTER 4. ANALYSIS AND INTERPRETATIONS**

71

- Classroom Environment
  71
- Classroom Teachers
  76
- Sara
  77
  - Sara's philosophy on war play
  78
Kate 84
Pam 84
Tara 85
Kindergarten Children 85
Amy 87
Carla 88
Evan 89
Eve 91
Jasmine 92
Jill 93
Karen 93
Kathy 94
Keith 95
Kevin 95
Lynn 96
Mary 96
Nina 97
Pete 97
Sam 100
Scott 100
Ted 101
Tim 102
Wade 102
Will 103
The Role of the Researcher 103
Analysis of Pretend and Real Aggression 105
Pretend aggression 110
Area in the room where pretend aggression occurred 110
Key players in pretend aggression 112
Sequence of pretend aggression 120
The aggressor in pretend aggression 124
The target in pretend aggression 129
Teacher interventions in pretend aggression 133
Termination of the pretend aggression 135
Summary of pretend aggression 138
Real aggression 138
Area in the room where real aggression occurred 139
Key players in real aggression 140
Sequence of real aggression 144
The aggressor in real aggression 147
The target in real aggression 152
Teacher interventions in real aggression 157
Termination of the real aggression 161
Summary of real aggression 163
LIST OF FIGURES

Figure 1. Diagram of the kindergarten classroom 72

Figure 2. Coding example from an observation of a kindergarten 107

Figure 3. Observational worksheet to record the sequence of real aggression or pretend aggression 109

Figure 4. Domain analysis worksheet 110

Figure 5. The sequence of pretend aggression 122

Figure 6. The sequence of real aggression 145
LIST OF TABLES

Table 1. Daily schedule of the full-day kindergarten 75
Table 2. The children and parents place of origin and the number of siblings in the family 86
Table 3. The frequencies of the area in the classroom where pretend aggression occurred 111
Table 4. The materials most frequently involved in pretend aggression 111
Table 5. The frequencies of children participating in pretend aggression 112
Table 6. The frequencies of children who initiated pretend aggression 125
Table 7. The frequencies of pretend aggressive behavior 126
Table 8. The frequencies of children who were targets of pretend aggression 130
Table 9. The frequencies of the target's response to pretend aggression 131
Table 10. The frequencies of teacher interventions in pretend aggression 134
Table 11. The frequencies of the area in the classroom where real aggression occurred 139
Table 12. The materials most frequently involved in real aggression 140
Table 13. The frequencies of children participating in real aggression 141
Table 14. The frequencies of children who initiated real aggression 148
Table 15. The frequencies of real aggressive behavior 149
Table 16. The frequencies of children who were the targets of real aggression 153
Table 17. The frequencies of the target's response to real aggression 154
Table 18. The frequencies of teacher interventions in real aggression 158
CHAPTER 1. BACKGROUND AND PURPOSE

Every day, children are exposed to acts of violence in their communities, in their families, and in the media. During the 1990's, violence among American children and adolescents increased. According to Walsh (1995), a 264% increase in violent crime among 15-year-old American males was observed between 1990 and 1994. Every year 3.6 million high school students are physically attacked, primarily by other adolescents. Additionally, more than 5% of American school children carry guns (Walsh). According to the Children's Defense Fund (1999), a child dies from a gun shot wound every two hours in the United States and "more teenage boys die of gun shot wounds than all other causes of death combined" (Walsh, p. 5).

School districts throughout the United States have taken measures to increase the safety of their students. The increased incidents of assaults, property damage, and gang activity have forced school officials to employ security and police personnel to patrol school hallways, to build concrete walls around playgrounds, and to equip school busses with surveillance cameras (Walsh, 1995). Furthermore, after several highly publicized school shootings by youth in 1997-1998, President Clinton announced that $90 million dollars would be allocated to study school safety in an effort to combat school violence (Simon, 1998). In addition, a law requiring safety locks on guns passed in the Senate in 1999, but only after youths using explosives and guns killed and injured students in Colorado and Georgia (Kellman, 1999).

Several individuals connected to the school shootings believe that a strong link exists between youth violence and the entertainment industry. Parents of three children killed in a Kentucky school shooting fought back by filing a lawsuit against the entertainment industry ("Media Companies," 1999). Nevertheless, the exploitation of violence continues to be a profitable business for the media and entertainment industries that target child consumers. Since 1970, violent television programming has increased (Carlsson-Paige & Levin, 1987).
Not only has violence been rampant in television dramas, but the exploitation of violence has been commonly used by cartoons, talk shows, news media, and portrayals of real life police officers and bounty hunters. Before the average child is 18 years old, he or she will have witnessed 200,000 acts of violence on television (Walsh, 1995).

In the 1980's, the Reagan administration deregulated the broadcasting industry. As a result, regulations that were used to govern children's television programming were eliminated by the Federal Communications Commission (FCC) and product based programming became legal (Brotman, 1987; Carlsson-Paige & Levin, 1987). This opened a door for children to buy more toys, including main characters, scenery, and weapons based on television programs (Carlsson-Paige & Levin, 1987). In the fall of 1987, toy companies produced 80% of all children's television shows, many of which focused on violence (Carlsson-Paige & Levin, 1990). By creating toys and television shows as packages, a lucrative relationship was established between the toy and television industries. In 1994, the sale of products linked to Power Rangers, one of the most violent children's television programs, set an industry record by surpassing one billion dollars (Levin & Carlsson-Paige, 1995).

Modern technology has enabled toy manufacturers to create toys that allow children to simulate realistic acts of violence. In 1987, expensive interactive toys became available for specific television programs allowing children to use finger triggered power jets and spaceships to shoot the "bad guys" they see on television. Inaudible cues from the television activated the toys (Truchsherer, 1988). Furthermore, the National Coalition on Television Violence (1989) found that violence was a theme in 80% of Nintendo video games sold in the United States. The object of one popular video game, "Mortal Kombat," was not only to kill the enemy, but to increase the players skills in malicious ways to kill (Walsh, 1995). "The ultimate goal is [to create] a virtual reality game where violence is indistinguishable from that of real life" (Walsh, p. 72). Walsh suggested that "by targeting violent entertainment at children we are promoting their violent behavior" (p. 16).
Small steps have been taken to address the public's concerns about television violence. The Children's Television Act of 1990 set limits on the amount of advertising in children's programming and set up expectations for television stations to serve the educational needs of children. Furthermore, the television networks began to attach "viewer discretion" warnings to prime time movies in 1987, and a rating system, similar to the movie industry, is now being used to alert parents to the appropriateness of television programs for children. In addition, parents can block out programs they consider inappropriate for children by using an electronic device known as a "V-chip" (Boyatzis, 1997; Murray, 1997). However, it is not likely that these measures will eliminate children's exposure to war cartoons (Boyatzis) or the culture of war toys that continues to creep into schools and homes, even when war play is banned (Carlsson-Paige & Levin, 1987; Jordan & Cowan, 1995; Wegener-Spohring, 1989).

Parents and early childhood educators have expressed concerns regarding the effect that this link between violent television programs and single purpose war toys has upon children's war play (Carlsson-Paige & Levin, 1987). Carlsson-Paige and Levin (1990) suggested that the media and the toy industries are major socializing agents in children's lives, dictating the content of children's play and the lessons that they learn. Teachers and parents have expressed concerns about the effect of violent television on children's play and the repetition of violent acts children use in play to imitate television characters. Early childhood teachers have reported an increase in aggression and a lack of creativity in children's play since the deregulation of the broadcasting industry (Carlsson-Paige & Levin, 1987, 1990).

This increase in violence and aggression among children has continued to concern teachers. Early childhood teachers have reported that children express aggression associated with war cartoons in their social interactions, artwork, story writing, and free play activities (Levin & Carlsson-Paige, 1995). However, there is little empirical evidence to support the teachers' reports of increased aggression in children's war play (Boyd, 1997).
Boyd (1997) suggested that teacher reports of increased aggression may not be objective. First, teachers and children have different perspectives on real and pretend aggression. Young children understand the difference between actual aggression and pretend aggressive behaviors (e.g., fighting in war play) (Engel, 1984; Wegener-Spohring, 1989); but parents, educators, and researchers find it difficult to distinguish real acts of aggression from pretend aggressive episodes (Sutton-Smith, 1988; Wegener-Spohring). In addition, teacher perspectives often differ from other non-teaching adults. Connor (1989) found that teachers rated children's behavior as aggressive rather than playful more often than did other nonteaching adults. Boyd (1997) suggested that the responsibility of teachers to keep children safe causes them to be overly sensitive to play that might lead to potential disruptions or injury.

Several researchers suggested the need for more studies on war play and aggression (Boyd, 1997; Carlsson-Paige & Levin, 1987; Jenvey, 1988; Sutton-Smith, 1988). Although there have been reports of increased aggression in children's war play (Carlsson-Paige & Levin, 1987, 1990; Levin & Carlsson-Paige, 1995), the only available evidence is based on anecdotal reports from early childhood professionals and teacher surveys (Carlsson-Paige & Levin, 1987; Levin & Carlsson Paige, 1995). Furthermore, parent questionnaires and preliminary observational data indicate that the incidence of war play in children's play is low (Boyd; Costabile, Genta, Zucchini, Smith, & Harker, 1992). In addition, methodological problems have prevented researchers from discovering a clear relationship between war toys (i.e., the manufactured toys specifically designed to be used in war play), and aggression (Jenvey; Sutton-Smith).

It is important to study childhood aggression, because aggression has been related to poor developmental and behavioral outcomes in adolescence and adulthood. For example, childhood aggression has been found to predict adolescent drug use (Brook, Whiteman, Finch, & Cohen, 1995; Dobkin, Tremblay, Masse, & Vitaro, 1995) and delinquency (Brook,
Whiteman, & Finch, 1991; Huesmann, Eron, Lefkowitz, & Walder, 1984). Huesmann et al. found that aggression displayed at an early age in school has a good chance of turning into severe antisocial aggressiveness such as criminal behavior, physical aggression, and child abuse in young adults. In addition, aggression has been found to be a stable trait within individuals over time (Cummings, Iannotti, & Zahn-Waxler, 1989; Huesmann et al.) and across generations within families (Huesmann et al.). Finally, interventions aimed at aggressive behavior problems among older children and adolescents have not been successful (Patterson & Fleischman, 1979).

Although many studies have been conducted on children’s real aggression (e.g., Coie, Dodge, Terry, & Wright, 1991; Crick & Gropeter, 1995; Farver, 1996; Graham & Hoehn, 1995; Huesmann et al., 1984; Kupersmidt, Griesler, DeRosier, Patterson, & Davis, 1995) the research on children’s “pretend” aggression in war play is scarce (Boyd, 1997). Brian Sutton-Smith (1988) noted that researchers often fail to distinguish between real aggression and playful aggression in their studies on childhood aggression. Researchers who have examined the relationship between real and pretend aggression have observed children within limited settings. For example, Goff (1995), Watson and Peng (1992), and Wegener-Spohring (1989) observed children only during indoor free play. Furthermore, several researchers manipulated the type of toys available for the children during play (Connor, 1991; Goff; Watson & Peng). When researchers have examined real and pretend aggression, without introducing war toys into the natural classroom setting, they did not limit their observations to acting out warrior themes in dramatic play (Frey & Hoppe-Graff, 1994; Wegener-Spohring). In addition, the process of the children’s interactions in pretend aggression has not been addressed (Frey & Hoppe-Graff), and there is little research on the teacher’s role in pretend aggression. Finally, a number of war play studies were conducted outside of the United States (Costabile et al., 1992; Frey & Hoppe-Graff; Jordan & Cowan, 1995; Wegener-Spohring). It is possible that cultural differences exist in how children participate in real and pretend aggression.
In this study, the issue of whether participating in dramatic war play caused children to be more aggressive was not addressed. Instead, a microanalysis approach was used to discover the behavior children used in real aggression and acted out in pretend aggression. A detailed description of real and pretend aggression may help researchers and teachers to distinguish between the two.

The purpose of this study was to describe the real and pretend aggression exhibited by children in a full-day kindergarten classroom. The main objective was to discover the sequence of aggressive episodes and how children executed aggressive acts within the real and pretend aggression that naturally occurred during the course of free play. In addition, teacher behaviors were examined to determine how teachers intervened when aggression occurred within the context of reality or in the world of make-believe. The second objective was to interview the children and the classroom teachers. The combined goal of these objectives was to gain a fuller understanding of the difference between children's real and pretend aggression and how teachers intervened in both real and pretend aggression. The following questions were explored to investigate children's aggression:

**Guiding Questions**

1. How are children exhibiting both real aggression and pretend aggression?
2. How do the children react to real aggression and pretend aggression?
3. What is the frequency of real aggression and pretend aggression?
4. What are the characteristics of children who frequently participate in real aggression and pretend aggression?
5. How did the teacher intervene in real aggression and pretend aggression?
CHAPTER 2. LITERATURE REVIEW

The literature on real and pretend aggression will provide the empirical base for this study. The literature review begins with the rationale and theoretical framework for the study, followed by an examination of theories on childhood aggression and the definitions of real and pretend aggression. Then, the findings that relate aggression to violent television, violent toys, and acting out violent themes in dramatic play are investigated. Also included is a summary of options teachers and parents have for addressing pretend aggression.

In addition, empirical findings regarding gender, sociometric status, and the developmental change of real aggression will be investigated. Factors contributing to children's aggression and how aggression affects children's interpersonal relationships will be explored. Finally, findings pertaining to how teacher behaviors in classroom environments can contribute to the display or suppression of pretend and real aggression are considered.

Rationale and Theoretical Framework

Play represents reality with an "as if" or "what if" attitude and it connects or relates children's experiences. In play, children are actively involved in a pleasurable, intrinsically motivated, rule governed activity with emerging and shifting goals that children develop spontaneously (Fromberg, 1992). Play is the foundation of children's learning and development. Through play, children construct understandings of concepts and explore feelings (Piaget, 1951; Smilansky, 1968; Carlsson-Paige & Levin, 1987).

According to Piaget (1951), behaviors are considered to be play when there is a predominance of assimilation over accommodation. Assimilation occurs when children transform incoming information about the world, so that it fits their current level of understanding. Piaget believed that as children play, they actively construct mental structures or schemas that allow them to represent objects, actions, and events in their minds. Representational thought is developed as children participate in make-believe play (Piaget, 1951; Singer, 1994).
Children involved in make-believe play, take on roles and act out scenes from what they have experienced or observed in their daily lives. As they pretend, children imitate the actions and words of other persons, often using real or imaginary props. The children may also use their own words to create objects, actions, and situations. Two essential elements of make-believe play are imitation and imagination. Imitation refers to children trying to act, talk, and look like a real person or create a life-like situation. Children use their imaginations to overcome limits in their abilities to imitate real life. Through make-believe, children use words to take on make-believe roles, transform objects, perform actions, and describe situations (Smilansky, 1968).

War play is a form of make-believe play often considered by parents and educators to be aggressive. War play involves acting out roles of violence, aggression, or war that children have witnessed or experienced in their homes, neighborhoods, or on television. Although war play can include manufactured war toys, children can also use their imaginations to turn their finger, a stick, or a pen into a powerful weapon (Nilsson, 1989).

Debates continue among researchers, theorists, and educators as to whether it is necessary for children to act out war play scenarios. According to Carlsson-Paige and Levin (1987), there are two broad theories, developmental and sociopolitical, that are important for teachers to consider when making decisions regarding children's war play in the classroom.

**Developmental theories**

Developmental theorists suggested that "play, including war play, is a primary vehicle through which children work on developmental issues" (Carlsson-Paige & Levin, 1987, p. 17). Children use their play to construct meaning from experience and to work on their social, emotional, and intellectual growth (Carlsson-Paige & Levin, 1988). Developmentalists have argued that children express what they need to work on through their play; therefore, if they are participating in war play, it must be meeting certain developmental needs (Carlsson-Paige & Levin, 1987, 1988; Kostelnik, Whiren, & Stein, 1986; Wolf, 1984). Researchers have
suggested that "war play helps children meet their needs for power, control, and mastery" (Carlsson-Paige & Levin, 1988, p. 82). Also it is a tool to help children learn to distinguish "fantasy from reality, good from bad, right from wrong, and express anger and aggression at a time when children are being asked, in real life, to gain control of them" (Carlsson-Paige & Levin, 1988, p. 82). Finally, according to the developmentalist perspective, war play is pretend; it is not connected to real world violence. Therefore, it should be viewed in terms of what it means to children which is often different from what it means to adults who bring to it their knowledge of violence in the world (Carlsson-Paige & Levin, 1988).

**Sociopolitical theories**

The proponents of the second theory, a sociopolitical theory, suggested that children's experiences and education influence the formation of their political perceptions and attitudes and determine the range of alternative behaviors available to them as adults (Carlsson-Paige & Levin, 1987). During the preschool years, the child's political world begins to take shape and undergoes rapid changes as the young person acquires basic political orientations from others in the environment (Easton & Hess, 1961). "Those who look at war play from the sociopolitical perspective believe that young children use play to develop social and political concepts and values about the world" (Carlsson-Paige & Levin, 1988, p. 83). According to Carlsson-Paige and Levin (1987), the sociopolitical theorists assumed that "children learn militaristic political concepts and values through war play" (p. 24). Sociopolitical theorists believe:

*War play by its focus on killing and enemies, teaches children lessons about violence as an acceptable solution to problems, violent relationships among people, authoritarian power relationships, sex role stereotyping, weapons as a source of power and strength, and war as attractive. (Carlsson-Paige & Levin, 1988, p. 83)*
Few parents and educators want to teach these ideas and values to children; therefore, many teachers have chosen to ban children's war play (Carlsson-Paige & Levin, 1988; Wegener-Spohring, 1989).

However, Beresin (1989) suggested that Carlsson-Paige and Levin (1987) supported a cultural bias by stating that the sociopolitical perspective "is one opposed to war toys" (p. 223). Beresin pointed to organizations, including the National Rifle Association and Citizens Committee for the Right to Keep and Bear Arms, as evidence of alternative cultures which encourage ownership and use of weapons. Beresin concluded that "for whatever our own biases, there are those who celebrate guns, and those who celebrate nonviolence, and those who celebrate each in certain contexts" (p. 223).

"Warrior narratives assume violence is legitimate and justified when it occurs within a struggle between good and evil" (Jordan & Cowan, 1995, p. 728). This is important to consider when many researchers believe that children can form a schema for reasoning about conflict based on their war games and play-fighting, media and teaching about war, and social interpersonal conflicts (Carlsson-Paige & Levin, 1987).

By age seven, children have a fairly good understanding of war and peace, and they are quite knowledgeable about guns, planes, and soldiers (Cooper, 1965). Furthermore, young children believe that between warring nations, one nation is right and the other nation is wrong. They do not understand that two nations can be both right or both wrong or something in between. These differences were revealed when preschool children were asked how they resolved their own conflicts and how countries resolved conflicts. Allen, Freeman, and Osborne (1985) found that 40% of the children questioned suggested that countries resolved conflict through violence, 40% mentioned talking and forgiving, and 10% suggested conflicts were resolved through law, social order, or authority figures. In contrast, when asked how they resolved their own conflicts with peers, 80% suggested nonviolent resolutions, 20% referred to an authority figure, and only one child mentioned violence.
These findings indicate that children may have inaccurate beliefs about the amount of violence used by world powers to resolve conflict; but, in their daily lives, children relied on nonviolent strategies to solve interpersonal problems (Allen et al.).

Goff (1995) suggested the aggression that occurs within the context of pretend is just part of the war play script and is seen by children as part of the play. Wegener-Spohring's (1989) interviews with fourth grade children support Goff's suggestion. Wegener-Spohring found that children were able to distinguish the reality of real violence and war from the pretend aggression of war play. Unlike real violence, the children said it was fun to be a participant in war play. What was fun about playing war included fighting, fighting with action figures, making onomatopoeia vocalizations (e.g., "Crash, bang, boom!", p. 37), making decisions, and feeling powerful. Although the children did not believe war toys made children aggressive, one boy commented that war toys may make children nervous and there were some negative statements made regarding war toys, particularly by the girls (Wegener-Spohring).

Goff (1995) suggested that parents' and educators' main concern should be the aggression that extends beyond thematic play into children's real lives. However, do children use the aggressive behaviors learned in war play to resolve conflicts in real life? Several theories of aggression will be explored to gain a better understanding of the relationship between children's pretend aggression and the aggression they use in real life.

**Childhood Aggression**

Is aggression an innate characteristic within all humans or do humans learn to be aggressive through their interactions with the environment? Several theories have been constructed in an effort to answer this central question (Bandura, 1973; Dollard, Miler, Doob, Mowrer, & Sears 1939; Freud, 1928; Lorenz 1966). First, Freud (1928) believed there were opposing forces in the form of instincts within all humans. Eros, a life instinct, is composed of a group of sexual instincts whose aim it is to achieve renewed life, and a death instinct,
Thantos, which attempts to “lead what is living to death” (Freud, 1928, p. 82). In later writings, Freud (1933) referred to the death instinct as an aggressive instinct focused on destruction of the self, but to prevent us from destroying ourselves, we must destroy other people and objects.

In contrast, Lorenz (1966) believed that all animals have an innate aggressive instinct that is essential for the survival of the species. Lorenz’s theory is based on Darwin’s theory of evolution. According to Lorenz, aggression is not a principle of destruction; rather aggressive behaviors are used to preserve the species by defending the young, selecting the strongest mate, and balancing the number of the same species over the available environment. Lorenz argued that all animals, except humans, are equipped with inhibitions that prevent them from injuring and killing their same species. Inhibitions were not necessary for humans, because humans did not have the physical capabilities of killing each other until they created weapons. In essence, Lorenz believed that aggression is a life preserving drive, but its spontaneity may cause it to function in the wrong way and cause destruction (Lorenz).

According to Dollard et al. (1939), aggression is “any... sequence of behaviors, the goal response to which is the injury of the person toward whom it is directed” (p. 9). Dollard and his colleagues argued that aggression was the result of frustration. They assumed that frustration always occurred before aggression and that aggression always occurred after feelings of frustration. However, the aggression did not need to be overt. It could occur in a dream, a fantasy, or a well thought out plan of revenge. The aggression could be directed at the person or object causing the frustration or displaced to an innocent object, person, or even the self. The aggression could be targeted at an inanimate or animate object or not directed at any object (e.g., swearing after pinching your finger in a door) (Dollard et al.).

However, Bandura (1973) did not believe frustration and anger were necessary for aggression to occur. According to Bandura, emotional arousal only increases the probability that a person will behave in an aggressive manner. Unlike the instinct and drive theories that
assume aggression is innate, Bandura argued that aggression is learned through direct experiences and observation of others in the environment. Bandura believed that aggression is learned like any other social behavior and is under the control of stimulus, reinforcement, and cognitive control. The rewards received following the use of aggression increase the likelihood that aggression will occur again. In contrast, aggression typically decreases or is eliminated when the behavior is punished, or no longer rewarded. Children can learn to behave aggressively by observing people in their everyday lives or on television committing aggressive acts and then storing these acts into their memories. Children also learn to exhibit aggression when they are reinforced for the behavior. Through reinforcement, aggressive behaviors are more likely to result in aggression in the future. Aggressive behavior may be maintained if it becomes an effective means to obtain a desired goal, if it is approved of by society, if it is necessary for self-protection, or if the aggressor enjoys hurting others and is intrinsically rewarded for it. Because Bandura viewed aggression as a learned behavior, he provided hope for the successful intervention of problem aggressive behaviors. He suggested that aggressive behaviors could be eliminated if the social conditions and positive reinforcements that maintain the behaviors are removed (Bandura).

However, drive theorists (Dollard et. al., 1939) suggested that aggressive behavior itself can act as a catharsis to reduce the expression of other aggressive behaviors. The catharsis hypothesis would suggest that participating in substitute aggressive acts, such as pretend aggression, lowers aggressive drives and reduces the expression of future aggression (Feshbach, 1956). Feshbach found that college students who were insulted and then allowed to express aggression in the form of fantasy were less aggressive toward the person who insulted them than college students who were insulted, but not given the opportunity to engage in fantasy. A catharsis hypothesis would suggest that thoughts of aggression or previous acts of aggression might alleviate a person's need to behave aggressively in the future.
However, other research (Berkowitz, 1964; Mallick & McCandless, 1966) has failed to support the catharsis hypothesis. It is more likely that previous displays of aggression lead to an increase rather than a decrease in future aggression (Mallick & McCandless).

Berkowitz (1964) found no support for the catharsis hypothesis. In his study, pairs of male college students were asked to solve problems and then, evaluate each others work by giving shocks to their partners for inadequate solutions. The students worked independently to solve the problems. After one student completed the problem, the experimenter administered eight shocks to the student. The student was under the impression his partner was administering the shocks. The excessive number of shocks caused the student to become angry with his partner. Some of the college students who were shocked were told they could use shocks to evaluate their partner's work. The remaining students would not be able to shock their partner. When the students were shown their partner's work, only half of those who were told they would have an opportunity to shock their partner were actually given this chance. Half the students who had not expected to shock their partner were also given an opportunity. The students were allowed to give as many shocks as they wanted. Then, the students assessed their partner's performance on a second problem. At the end of the session, college students who were previously given an opportunity to act aggressively, by shocking their peers, did not display less aggression than students who were not able to shock their peers. Thus, no evidence was found for a cathartic reduction in aggression (Berkowitz).

Berkowitz (1964) suggested that encouraging people to aggress will not reduce the probability of the person aggressing in the future, but may provide the person with "aggression-evoking cues" (p. 121). Berkowitz (1964) proposed that people will act aggressively when certain cues or stimuli in the environment are associated with people or events that have made them angry or aggressive. In other words, if a person associates an object or person in the environment with aggression the individual is more likely to behave aggressively if that object or person is present (Berkowitz, 1964). However, if a person is
very angry, he may display aggressive behaviors even when an aggressive cue is not present (Berkowitz, 1974).

Berkowitz (1984) now believes that cognitive-neoassociation theory can explain how people react to aggression. According to cognitive-neoassociation theory, memory is made up of networks containing nodes and associated pathways connect the networks. The strength of the associated items depends upon similarity, contiguity, and semantic relations. Berkowitz believed that through spreading activation, thoughts can spread to other nodes leading to a priming effect. This means that when an aggressive thought is activated, it is likely that other aggressive thoughts associated with the first thought will come into a person's mind. Therefore, watching a violent movie may automatically prime or activate other thoughts, feelings, or action tendencies related to aggression. He argued that people do not merely imitate the aggressive behaviors they observe, but respond to the concepts that are related to the aggression. The reactions or thoughts activated may not need to be learned, but may merely exist for a brief period and diminish over time. Furthermore, people do not always imitate precisely the aggression they observe, but display behaviors that are physically different from what they observed. He suggested that people respond to the meaning of the aggressive event that activates ideas related to the aggression and exhibit similar rather than the same aggressive behaviors. However, the activation of thoughts related to observed aggression will not occur if a person lacks the association pathways in his or her memory. As Berkowitz explained, "aggression is in the mind of the beholder, and a movie will not activate aggression-associated thoughts unless the viewer regards what is seen as aggression" (p. 419).

Finally, social cognitive models have also been used to explain aggressive behavior (Pepler & Slaby, 1994). Two models that may provide a useful framework for understanding the aggression in this study are the cognitive script model and the social problem-solving model. Through the cognitive script model (Huesmann & Eron, 1984), children learn cognitive schemas or scripts for aggression by repeatedly rehearsing aggressive strategies in
fantasy, observation, or actual behaviors. Huesmann and Eron (1984) hypothesized that the more a child fantasizes about aggressing, observes aggression, or behaves aggressively, the more readily the child will retrieve aggressive strategies, and the more likely it is that the child will aggress. It is also possible that children will respond to cues in the environment with aggression, by retrieving aggressive scripts from memory. Aggressive behaviors can be reduced by changing children's aggressive scripts and normative beliefs about aggression (Huesmann 1988; Huesmann & Eron 1984, 1989).

Social problem solving can also be used to reduce aggressive behaviors (Pepler & Slaby, 1994). Adults can increase children's abilities to successfully solve problems, through nonaggressive means, by helping them build their social and cognitive skills (Rubin & Krasnor, 1986; Spivack & Shure, 1974). Problem solving involves the cognitive ability to identify social problems, generate alternative solutions, select strategies, implement chosen strategies, and evaluate outcomes (Rubin & Krasnor). Spivack and Shure found that people who are well adjusted consider a greater number of alternative solutions to problems and include more nonaggressive strategies than people who are poorly adjusted. Interventions aimed at increasing children's skills in solving problems can reduce behavior problems. Children can improve their problem solving skills by being trained to think of alternative possibilities and consider the consequences of their actions (Spivack & Shure). Problem solving is often suggested as a tool to combat children's violence and aggression in the classroom (Levin, 1994, 1995a; McAlister Groves & Mazur, 1995; National Association for the Education of Young Children, 1993).

Definition of real and pretend aggression

Although childhood aggression has been the topic of several studies (e.g., Coie et al., 1991; Crick & Gropeter, 1995; Farver, 1996; Graham & Hoehn, 1995; Huesmann et al., 1984; Kupersmidt et al., 1995), researchers often fail to distinguish between real aggression and playful aggression (Sutton-Smith, 1988). Aggression has been defined as behaviors used
by individuals that are intended to hurt or harm another person (Dollard et al., 1939; Crick & Grotpeter, 1995). Most researchers studying aggression focus on overt aggression which is the "harming of others through physical aggression, verbal threats, or instrumental intimidation" (Crick & Grotpeter, p. 710). It is common for the elements of overt aggression including verbal aggression, physical aggression, and escalated aggression to occur together (McCloskey, Figueredo, & Koss, 1995). In contrast, other researchers have studied relational aggression which is the "harming [of] others through purposeful manipulation and damage of their peer relationships...including behaviors intended to damage another child's friendships or feelings of inclusion by the peer group" (Crick & Grotpeter, p 711).

Two qualitative components of overt aggression include reactive and proactive aggression. Reactive aggression is an aggressive act "accompanied by anger or distress in response to the actions of the target" (Coie et al., 1991, p. 815). In contrast, there is no anger or distress exhibited by the aggressor in episodes of aggression that are proactive such as instrumental aggression or bullying. Instrumental aggression occurs when the aggressor uses aversive means to obtain a goal. Whereas, bullying or dominant aggression occurs when an unprovoked aggressor coerces, intimidates, makes fun of, taunts, or assaults another child without a clear goal for his or her behavior (Coie et al.).

In contrast, to the previous definitions of aggression, pretend aggression is an act about overt aggression (Frey & Hoppe-Graff, 1994). Researchers have defined pretend aggression as children exhibiting aggression in the context of make-believe, that includes children or doll characters acting out roles (e.g., "I'll be Batman, you be Robin"), children pretending to transform objects into other objects (e.g., pretending a Lego is a gun), or children creating objects and imaginary people (e.g., "Let's pretend Joker's cat took the book") (Goff, 1995; Watson & Peng, 1992). In a study to examine how acts of aggression were classified, Connor (1989) asked preservice teachers, college students, and children to offer reasons why they would classify an incident they viewed as playful or aggressive. She
found that the children's physical actions and inferences regarding the intent of children's actions were the main reasons an event was classified as simply play or an act of real aggression. Responses such as "he's only playing" or "he didn't really hit him" were given when a participant classified an event as playful rather than an act of real aggression (Connor).

**War Play and Childhood Aggression**

War play involves acting out roles of violence, aggression, or war that children have witnessed or experienced in their homes, neighborhoods, or on television (Nilsson, 1989). Three activities that occur in children's war play include: (1) the imitation of television figures, particularly cartoons, using action figures based on these television programs, (2) toy replicas of warrior weapons or the creation of warrior weapons using manipulatives or construction materials, and (3) acting out warrior themes in dramatic play (Dodd, Dollins, Snyder, & Welch, 1992). Typically, children's war play involves a conflict between good guys and bad guys and may include good guys saving, helping, or protecting helpless victims (Carlsson-Paige & Levin, 1990; James & McCain, 1982; Jordan & Cowan, 1995).

War play is almost exclusively a boy's activity

Boys are more likely than girls to participate in aggressive play including superhero play and dramatic play with war themes (Boyd, 1997; Carlsson-Paige & Levin 1987, 1990; Costabile et al., 1992; Haas Dyson, 1994; Jordan & Cowan, 1995; Paley, 1984; Sutton-Smith, 1988; Wegener-Spohring, 1989). Boys like play themes of danger and violence that involve fighting, killing, and simulated wars (Cramer & Hogan, 1975). Boys are also more likely than girls to play with guns (LaVoie & Adams, 1974) and war toys involving face-to-face fighting, shooting, and action figures (Wegener-Spohring). Through group discussions and questionnaires, Wegener-Spohring gathered statistics on children's war toys in 20 fourth grade classrooms. Of the 218 boys in the sample, 76% owned war toys and 45% wanted more war toys. In contrast, 29% of girls owned war toys and only 3% wanted more of them. Girls are more interested in dolls, house, and family games (Paley). Common roles of girls include
mothers, nurses, brides, and princesses (Jordan & Cowan; Paley). Paley suggested that the role of mother and princess may be as powerful for girls as the role of superheroes is for boys.

Haas Dyson (1994) captured this difference in play interests between boys and girls in a second grade classroom. For 3 months, Haas Dyson observed, audio taped, and took notes on the writing and acting out of superhero stories, based on the cartoon characters of Teenage Mutant Ninja Turtles and the X-Men. The superhero stories were composed primarily by boys. The girls did not initially write about cartoons, they wrote about family and friends. Even though the girls were knowledgeable about the cartoons and wanted to participate in the boys' stories, the boys excluded the girls from participating by writing stories that almost always included male characters and excluded female characters. The boys were not interested in having the girls in their story lines, they were interested in warrior themes, (i.e., setting up action between good guys and bad guys), aggression, and physical power (e.g., karate kicking) (Haas Dyson).

In contrast to the Ninja Turtles, the X-Men superheroes characters include both males and females as well as people of different color. Because there were more female superheroes, there were greater opportunities for female roles. The X-Men women were as strong as the men and an emphasis was placed on mental as well as physical strength. According to Haas Dyson (1994), girls demanded inclusion, but boys continued to exclude girls from their stories. When girls in the class chose to write their own stories, their experiences as relationship writers brought human fragility to the superheroes. In their stories, girls included superheroes who were female, had feelings, were ambivalent about physical power, and "bemoaned the destructiveness of physical violence" (Haas Dyson, p. 232). One girl wrote that the superhero cried, fought, became tired, and then died (Haas Dyson).

Carlsson-Paige and Levin (1990) suggested that boys and girls may be drawn to different play activities because they are working through gender issues. War play may be
attractive to boys, because they identify with the stereotypical and explicit male gender roles that are evident in war play themes. The roles boys act out in war play are almost exclusively linked to strong, powerful, fearless, and aggressive male television characters who rescue the weak and helpless female victims (Carlsson-Paige & Levin, 1990). Furthermore, society expects boys to be more aggressive than girls, and war play provides boys with a socially acceptable outlet for the expression of aggressive behaviors (Carlsson-Paige & Levin, 1987).

The effect of televised violence on children's play

Carlsson-Paige and Levin (1990) suggested that television is a major socializing agent in children's lives, dictating the content of their play and the lessons they learn. Anyone who has observed children's play will recognize that ideas for war play often come from viewing violent television programs, particularly violent cartoons (Carlsson-Paige & Levin, 1987, 1988; Dodd et al., 1992; Gronlund, 1992; Kostelnik et al., 1986; Ritchie & Johnson, 1982). Teachers and parents have expressed concerns about the effects of violent television on children's play and the repetition of violent acts children use in their play to imitate television characters. Early childhood teachers have reported an increase in aggression and a lack of creativity in children's play since the deregulation of the broadcasting industry (Carlsson-Paige & Levin, 1987, 1990; Levin & Carlsson-Paige, 1995).

Parents and teachers have good reason to be concerned about the effects of violent television on children's emotions and behaviors. On average, children who watch television will witness 8,000 murders and more than 100,000 acts of other violence before they leave their elementary schools (Huston, Donnerstein, Fairchild, Katz, Murray, Rubenstein, Wilcox, & Zuckerman, 1992). Murray (1997) summarized the effect of television violence on human behavior. First, when children watch television violence they may become aggressive and view aggression as an acceptable alternative for resolving conflicts. In addition, children who watch violent television programs may become desensitized to acts of real life aggression and the suffering of victims. They may also come to tolerate more violence in the world around
them. Finally, television violence can lead to fear, apprehension, and the belief that the world is a dangerous place to live (Murray, 1997).

Several reviews (e.g., Comstock, 1991; Eron, Gentry, & Schlegel, 1994; Huston et al., 1992; Liebert, Sprafkin, & Davidson, 1982) detail the overwhelming evidence that viewing aggression and violence on television can increase aggressive attitudes, values, and behaviors. Bandura, Ross, and Ross (1963) conducted the first study to investigate the effects of filmed aggression on children's behavior. Ninety-six preschool children were divided into three groups. All groups observed aggressive models hitting, kicking, and punching a bobo doll. However, one group observed real life models, the second group observed the models on film, and the third group viewed a person dressed up like a cartoon character. Following the demonstrations, the children in the three experimental groups were given a brief opportunity to play with highly attractive toys, but then were told they could not play with the toys. Instead, the children were taken to a different room where they played with some aggressive toys (e.g., bobo doll, a mallet, dart gun) and nonaggressive toys (e.g., tea set, dolls, cars). A fourth group was not exposed to aggressive models prior to playing and served as a control group. The children's imitative and nonimitative behaviors were recorded. The children's displays of aggression and their tendencies to inhibit aggressive behaviors were rated. Bandura et al. found that children who were exposed to the real or filmed aggressive models were more likely to be aggressive in the play situation and imitate the physical and verbal aggression than children in the control group. Bandura et al. concluded that children can learn to behave aggressively by observing characters on film.

Not only do children learn to imitate the aggressive behaviors of filmed models, but they are also more likely to harm other children after viewing televised violence (Hapkiewicz & Stone, 1974; Liebert & Baron, 1972). Liebert and Baron examined whether watching violent scenes on television would have an effect on a child's willingness to act aggressively toward another child. The participants included 136 children ages 5 to 9 years old. The
children were divided into an experimental group that viewed an aggressive television program and a control group that viewed a nonaggressive television program. After viewing the television programs, the children were given an opportunity to help a peer to turn a handle so the peer could win a game or hurt the peer by making the handle hot. The children who viewed the aggressive program were more likely to be aggressive toward another child (i.e., hurt the peer by making the handle hot) than children who observed the nonaggressive program (Liebert & Baron).

Hapkiewicz and Stone (1974) also found that boys who watched a real life aggressive film were more likely to hurt a peer in an effort to gain access to a "peep show" than nonaggressive children. Hapkiewicz and Stone divided 180 primary grade children into three groups. One group viewed a real life aggressive film, a second group viewed an aggressive cartoon, and the third group viewed a nonaggressive film. After watching the films, the children were allowed to watch a second film through a peephole in a box. However, the peephole was only large enough for one child to view the film at a time. Observers recorded the children's behaviors when the children tried to gain access to the "peep show." Hapkiewicz and Stone found that boys who viewed real life aggression on film were more likely to push, grab, or be verbally aggressive to peers than the children who viewed a nonaggressive film. The findings from these two studies suggest that children who watch violent television programs are more likely to hurt other children than children who watch nonviolent shows.

Several other researchers have found that children can become aggressive after viewing aggressive cartoons (Boyatzis, Matillo, & Nesbitt, 1995; Cameron, Abraham, & Cherni coffin, 1971; Ellis & Sekyra, 1972; Mussen & Rutherford, 1961). Researchers typically divided their sample of children into three groups. One group viewed an aggressive cartoon, a second group viewed a neutral cartoon, and a third group did not view a cartoon. Then either the aggressive behaviors were recorded during a play session (Ellis & Sekyra) or the children
were asked about their desire to perform an aggressive act (Mussen & Rutherford). Children
who viewed the aggressive cartoon were more likely to exhibit aggressive behaviors (Ellis &
Sekyra) or report that they would perform an aggressive act (Mussen & Rutherford) than the
children who viewed a neutral cartoon or no cartoon.

A more recent study investigated the effect of a specific war cartoon on children's
behavior. Boyatzis et al. (1995) conducted an observational study to determine the effects of
watching Power Rangers on the behaviors of 52 elementary children, ages 5-7, in an
afterschool program. The children were divided into two groups. The first group's aggressive
behaviors were recorded during a free play session. The second group watched a Power
Rangers episode with 140 aggressive acts, then aggressive behaviors were recorded during a
separate free play period. Boyatzis et al. (1995) found that the boys who watched only one
episode of Power Rangers, committed seven times more aggressive acts than children who did
not watch the cartoon. The boys who watched Power Rangers imitated the cartoon
characters by directing flying kicks and karate chops toward their peers (Boyatzis, 1997;
Boyatzis et al., 1995).

Cross national and longitudinal studies also support the hypothesis that watching
aggressive television programs is related to children's aggressive behavior (Eron, Huesmann,
Lefkowitz, & Walder, 1972; Huesmann & Eron, 1986). For example, Eron et al. collected
interview data from children, parents, and peers to examine the effects of television viewing
habits on the aggressive behaviors of 875 third grade children. Ten years later, interview data
from 427 of the original 875 children and their peers were collected. Data on the children's
aggression were collected through a peer-rating instrument. The children's preference for
violent television programs was obtained in the third grade by asking the child's mother to
to name three of the child's favorite television programs. Ten years later, the child himself was
asked about his favorite television shows. Eron et al. found that boys who preferred violent
television programs were rated by their peers as more aggressive than other children in the third grade as well as 10 years later (Eron et al.).

The relationship between violent television viewing and aggression is not specific to children in the United States. Researchers in five countries, Australia, Finland, Israel, Poland, and the United States, investigated children's aggressive behavior. Although there were separate investigators for each country, many of the procedures were the same. In all five studies, children, parents, and peers were interviewed over a three-year period. The sample sizes ranged from 85 children in Israel to 421 children in the United States. Initially, 50% of the children, aged 6-10 years, were in the first grade and 50% were in the third grade. Two 40-minute sessions were used to collect the children's data. A paper pencil survey was administered to most of the children in a group setting, but some first grade children were individually interviewed. The measure of aggression included peer nominations and self-ratings. Children were asked to rate their aggressive behavior, television habits, the reality of television programs, and their identification with television characters. Ratings were also used to investigate the relationship between aggression and sex roles, fantasy, and intelligence (Huesmann & Eron, 1986).

In addition, parent interviews were conducted during the first year of the study. Researchers in three countries interviewed the parents again in the third year to collect information pertaining to demographics, nurturance, rejection, punitiveness, parent mobility, parent aggression, the parent's television habits, and fantasy behavior. The findings are based on several correlations (Huesmann & Eron, 1986).

The investigators in all five countries found a significant relationship between television violence and aggression. The children who were more aggressive preferred violent television programs, viewed more violent programs, identified more with the television characters, and believed violent programs more often resembled reality than less aggressive
children. However, aggression was also found to be influenced by the culture, environment, parental norms, and personal characteristics (Huesmann & Eron, 1986).

Although many programs produced for children continue to be violent, researchers have concluded that violence is not necessary for holding children's attention. Huston-Stein et al. (1978) divided 66 preschool children into four groups. Group 1 viewed a high action-high violence television program. Group 2 viewed a high action-low violence television program. Group 3 viewed a low action-low violence television program. Unfortunately, a high violence-low action film could not be located at the time of the study. Children in group 4 did not view a television program and were immediately observed in free play. Groups 1, 2, and 3 were observed in a free play session before and after viewing the television programs. Huston-Stein et al. found that children were more attentive to high action programs than low action programs. The difference in attention did not depend upon the violence in the program. The children who viewed the programs containing high action, regardless of the level of violence, exhibited higher aggression and less imaginative play than the children who viewed the low action program or no program. They concluded that violence was not as important as action in holding children's attention to television programs (Huston-Stein et al.).

In 1986, Potts, Huston, and Wright conducted a study that included Huston-Stein's et al. (1978) three experimental groups plus a high violence and low action condition that was missing from the previous study. The visual attention of 32 pairs of boys, ages 3-6, was recorded while they watched either an animated or live television program. Similar to Huston-Stein's et al. study, the films varied in terms of high and low violence and high and low action. The findings support Huston-Stein's et al. conclusion. The boys attended more to the high action films than low action films regardless of the level of violence (Potts et al.).

However, Murray (1997) suggested that it is difficult to design fast-action programs for a wide range of children. Because the television industry relies on funds from advertisers who want their commercials to reach as many consumers as possible, they continue to rely on
fast-action, fast-paced, violent programs that are successful at holding the attention of a large heterogeneous audience of children (Murray).

The effect of war toys on children's play

The deregulation of the broadcasting industry made it legal to sell toys and weapons based on television programs to child consumers (Brotman, 1987; Carlsson-Paige & Levin, 1987). In the fall of 1987, toy companies produced 80% of all children's television shows, many of which focused on violence (Carlsson-Paige & Levin, 1990). Although there is substantial evidence that viewing violent television is associated with an increase in children's aggressive behavior, methodological problems have prevented researchers from discovering a clear relationship between war toys and aggression (Jenvey, 1988; Sutton-Smith, 1988).

Sutton-Smith (1988) concluded, after reviewing eight experimental studies on war toys, that no conclusive relationship could be drawn between war toys and aggressive behaviors. Aggressive behaviors that were exhibited by boys in experimental settings did not carry over to play in classrooms. Furthermore, only one of the eight experimental studies reviewed by Sutton-Smith reported girls responding to war toys with aggressive behaviors. Four of the eight studies reviewed by Sutton-Smith and four more recent studies on war toys are presented below.

Mendoza (1972) investigated the effect war toys have on children's aggressive behaviors. She divided 40 boys and girls, ages 5 and 6, into eight play groups. Each group of five children played for 20 minutes with either violent or nonviolent toys. The children were presented with each set of toys three times. Observers viewed videotapes of the free play sessions and recorded the number of aggressive behaviors that occurred. Mendoza’s definition of aggressive behaviors included both overt aggression and pretend aggression. More incidents of aggression were recorded when the children played with violent toys as opposed to the nonviolent toys. The boys' level of aggression was twice as high in the violent toy condition than in the nonviolent toy condition. However, the girls' aggressive behaviors
were nearly five times greater when violent toys were present than when nonviolent toys were in the playroom. Mendoza suggested that the increase in aggressive behaviors for girls may have been due to the presence of a female rather than a male investigator or the girls may have overreacted to the opportunity to play with stereotypically "boys" toys. However, Mendoza failed to measure pre-existing levels of aggression or discriminate between real and pretend aggression in her analysis.

Wolff (1976) also examined the effects war toys have on children's aggressive behavior. In addition, Wolff wanted to determine whether the immediate behaviors observed would be sustained over time and transfer to other settings. Only six kindergarten children participated in the study. Two children were rated by teachers as highly aggressive, two others as normal in aggression, and the final two were reported to be low in aggression. The children's aggressive behaviors and activity levels were recorded as they played in a room with either a set of violent toys or nonviolent toys. The children played with one set of toys on 5 days, 10 minutes per day, before the other set of toys was brought into the play room. Following the free play sessions, the children returned to their classrooms where observers again recorded their activity level and aggressive behaviors. Wolff found that the boys' aggressive behaviors increased when they played with violent toys, but the girls' aggressive behaviors did not. Activity level was not affected by toy condition and the aggressive behaviors observed during play with violent toys did not transfer to the children's classroom. Wolff suggested that the presence of the teacher may have inhibited the children's aggressive behaviors. Furthermore, aggressive behaviors may not have transferred, because violent toys were not available in the classroom. Although Wolff did measure pre-existing levels of the children's aggression, she failed to separate real aggression from pretend aggression. In addition, the generalizability of findings is limited by the small size of the sample.

Turner and Goldsmith (1976) investigated the effects of toy guns and toy airplanes on 13, four- and five-year-old, boys' aggression and rule breaking behavior in two settings during
sixteen, 30 minute, free play sessions. A higher rate of antisocial behaviors was observed when the toy guns rather than airplanes were introduced into the boys' usual toys. They concluded that the toy guns contributed to the higher rate of aggression and rule breaking behaviors rather than the novelty of the toy in the classroom. Turner and Goldsmith suggested that the toy guns may elicit thematic aggressive behaviors that serve as a cue to stimulate inappropriate acts of aggression. However, Turner and Goldsmith only measured real aggression and did not measure the children's pre-existing levels of aggression.

Potts et al. (1986) examined the influence of aggressive toys and prosocial toys on 32 pairs of 3- to 6-year-old boys after they watched either an animated or live television program. The films varied in terms of high and low violence and high and low action. The pairs of boys were assigned to two combinations of violence and action. For example, one pair of boys viewed a film high in violence and low in action, then a week later they viewed a film low in violence and high in action. Following each film, the boys were observed in a 12 minute free play session with either prosocial toys or violent toys. Nonthematic toys were also available during each play session. The prosocial toys elicited prosocial behavior, despite the fact that the boys had previously viewed a violent television program. The children exhibited aggressive behaviors when they played with violent toys. The aggressive toys elicited interpersonal physical and verbal attacks as well as object and fantasy aggression. However, these findings are not conclusive, because Potts et al. failed to measure the boys' pre-existing levels of aggression.

Children's play with toy guns and aggression was examined by LaVoie and Adams (1974). They interviewed 73 elementary children about two toy guns, two real guns, and their play with guns. The children had difficulty distinguishing a toy rifle from a similar looking real rifle that were displayed on a table. Children in the study believed that the main function of guns was to shoot people and 78% reported death was the consequence of being shot. Sixty-seven percent of boys and 38% of girls could aim and fire a gun correctly at the age of five
years. However, children who played with guns did not score higher on teacher ratings of aggression. LaVoie and Adams suggested that the failure to find an increase in aggression when children played with guns, may be due to the children lacking experience with war toys, or because the gun play occurred within the context of the school. However, LaVoie and Adams failed to measure the of children's aggression prior to playing with the toy guns and the teachers only rated children's real rather than their pretend aggression.

Several studies have tried to address the methodological difficulties of early war toy research. The most recent studies on war toys and aggression assess pre-existing levels of aggression and distinguish real aggression from pretend aggression (Connor, 1991; Goff, 1995; Watson & Peng, 1992). For example, Connor discriminated between children's real and pretend aggression in a study on children's play with toys. Eight children (5 boys, 3 girls), 4 and 5 years old, were divided into three groups based on their previously determined levels of aggression (i.e., high, moderate, low). Each group was exposed to three sets of toys: regular toys, micro war toys, and macro war toys. Micro war toys consisted of action figures and their corresponding accessories (e.g., G.I. Joe, Princess of Power). Macro toys consisted of child size accessories (e.g., guns, knives, and grenades) that children could use to act out war themes in play. The toys were presented in 20 to 30 minute sessions over a span of 4 weeks. The toys were presented to the children in the following order: rapport session with toys from own classroom, regular toys, micro war toys, macro war toys, regular war toys, micro and macro war toys, and all three sets of toys. Connor also collected qualitative data on children's play styles (i.e., interactive or solitary), play talk, play action, play themes, and choice of toys. Connor found that real aggression was only observed when children had disputes over toys. The least interactive play and most solitary play occurred when children played with the micro war toys. When children played with macro toys, observers recorded the most interactive play, dramatic play, and pretend aggression, but no real aggression was observed. The
children were able to control the aggression in their play by calling out phrases like "time out," "I’m dead," or "you can’t do that kick" (Connor).

Watson and Peng (1992) also measured pre-existing levels of aggression and distinguished between real and pretend aggression in their war toy study. They distributed questionnaires to the parents of 36 boys and girls, aged 3-5 years, to gather information pertaining to demographics, the number of toy guns in the home, the frequency of toy gun play, the children’s preferred television programs, the children’s preferred toys, and the forms of discipline the children received from their parents. Naturalistic observations of the children’s free play were conducted at their daycare centers. Children were randomly videotaped for 15 minutes each. Then, a second 15 minutes of videotape was recorded of the children playing with toys that included some war toys that the researcher brought to the center. Real and pretend aggression were coded as well as the duration of rough and tumble play and pretend play. Finally, story completion was used to assess pretend aggression (Watson & Peng).

Watson and Peng (1992) found that children who played with toy guns were more likely to exhibit real aggression and less likely to participate in nonaggressive pretend play than children who did not participate in toy gun play. However, toy gun play was not the most important predictor of children’s aggression. The strongest predictor of real aggression was parental physical punishment. Parent’s physical punishment was also related to less imaginative play and having more toy guns. In contrast, pretend aggression was predicted by the aggression level in the television programs children viewed, not parental punishment. Watson and Peng found that boys preferred aggressive television more than girls did, and boys were more likely to participate in pretend aggression than girls. In addition, children who participated in toy gun play and preferred aggressive toys to nonaggressive toys were more likely than other children to participate in pretend aggression.
Goff (1995) suggested that Watson and Peng's (1992) analysis of the data may not be accurate. According to Goff (1995), Watson and Peng should have performed a square root transformation on their correlation data and considered how the children in the free play sessions affected each other's play behavior. Goff (1995) set out to replicate Watson and Peng's (1992) study, but correct for the problems in their analysis.

Similar to Watson and Peng (1992), Goff (1995) investigated the effect of playing with violent toys on the behaviors and attitudes of 36 children, aged 3-5 years. She collected data through parent questionnaires and experimental play sessions. However, in the experimental condition, the children were divided into 12 groups of 3 children. The children participated in a 50 minute play session with both violent and nonviolent toys. The children's aggressive behavior was coded in regard to the context of real play or pretend play. Goff reported that when children played with the violent toys, as opposed to the nonviolent toys, the amount of real, pretend, and total aggression increased. Similar to Watson and Peng, Goff also found that boys rather than girls preferred violent television and violent toys. In addition, the children who preferred more violent toys and television shows had parents who possessed a more positive attitude toward spanking than the parents of children with less violent preferences. This finding provides some support for the relationship Watson and Peng found between parental punishment and childhood aggression. Goff suggested that these findings support Berkowitz's (1964) aggressive cue hypothesis that children are more likely to be aggressive when toys they associate with aggression are present.

Since the deregulation of the broadcasting industry in 1984, the television industry and toy industry have worked together to create several television programs with corresponding merchandise. Many of the programs have been war cartoons (Carlsson-Paige & Levin, 1987). Sanson and DiMuccio (1993) investigated the effect of watching cartoons and playing with toys associated with the cartoon. They divided 30 working-class children and 30 middle-class children, aged 3-5 years, into three groups. A base line rate of the children's aggressive
behaviors and prosocial behaviors was established in a 15 minute free play session. Then, one

group of children watched "Voltron" an aggressive cartoon, the second group watched

"Gummi Bears" a neutral cartoon, and the third group did not watch a cartoon. After

watching the cartoons, the children played with robots from the "Voltron" cartoon or bears

and dragons from the "Gummi Bears" cartoon. The three groups were divided into six groups
to balance the order of toy presentation. Children’s behaviors were observed and coded for

aggression and prosocial behaviors for 15 minutes when they played with one set of toys,
followed by a second 15 minute play session with the other set of toys. Although the

observers coded both real and pretend aggression, the overall rate of behaviors was so low
that the total across all categories of aggression was used in the final analysis (Sanson &

DiMuccio).

Sanson and DiMuccio (1993) found that "viewing aggressive cartoons and then

playing with the associated aggressive toys would lead to more aggression and less prosocial
behavior than viewing the neutral cartoon and playing with it’s associated toys" (p. 98).
However, the effect of toys on aggression was not as consistent as the effect of toys on

prosocial behaviors. When the effect of toys was examined without participants previously

watching a cartoon, children from working-class families displayed more aggression and
prosocial behaviors when they played with neutral toys as opposed to aggressive toys.
However, children from middle-class families displayed higher aggression and lower prosocial
behaviors when they played with aggressive toys than when they played with neutral toys.
Sanson and DiMuccio concluded that "aggressive toys seemed to be inhibiting prosocial
behaviors, while neutral toys promoted it" (p. 97).

In summary, prior to 1990, the majority of researchers found that boys' behavior
became more aggressive when they played with violent toys as opposed to nonviolent toys
(Potts et al., 1986; Turner & Goldsmith, 1976; Wolff, 1976). However, Sutton-Smith (1988)
argued that the findings were not conclusive, because early researchers failed to either
measure pre-existing levels of the children's aggression (LaVoie & Adams, 1974; Mendoza, 1972, Potts et al., 1986; Turner & Goldsmith, 1976) or discriminate between real and pretend aggression (Mendoza, 1972; Wolff, 1976). Researchers in the 1990's, corrected for these methodological problems, but the findings are still inconclusive. Although Watson and Peng (1992) and Goff (1995) found that children displayed more real and pretend aggression when they played with violent toys than when they played with nonviolent toys, Connor (1991) did not observe real aggression when children played with macro war toys consisting of child size accessories used to act out war themes.

**Acting out war themes in dramatic play**

Although acting out war themes in dramatic play has been a subject of several articles (Boyatzis, 1997; Boyd, 1997; Carlsson-Paige & Levin, 1987, 1988, 1990; Dodd et al., 1992; Kostelnik et al., 1986; Kuykendall, 1995; Levin & Carlsson-Paige, 1995; Levin, 1995a, 1995b; Nilsson, 1989; Wolf, 1984), there is little empirical evidence to support either a developmental or sociopolitical view. In addition, the majority of studies that exist rely on reports from parents and teachers. These reports may be biased, because teachers' perspectives of aggression may be different from the perspectives of children (Boyd, 1997). Reports that have examined aggression and the acting out of warrior themes are reviewed below.

In their informal observations of children in a preschool laboratory program, Ritchie and Johnson (1982) noticed changes in children's play over a two year period. More and more of the children's play appeared to be connected to television programs and movies, particularly superhero programs. The superhero play was more aggressive than the children's other play. Ritchie and Johnson analyzed the children's superhero play. They reported that superhero play included conflicts involving big over little and strong over weak. The conflicts in superhero play were solved through aggression that relied on physical strength or magical powers. Furthermore, in the children's superhero play there were a limited number of
characters, usually only one hero and a trusted companion. The other roles consisted of victims and bad guys. Ritchie and Johnson (1982) concluded that superhero play provides children with physical activity and allows children to express their anger and aggression.

Parents have also reported noticing an increase in the aggression of children's play (Carlsson-Paige & Levin, 1987). Carlsson-Paige and Levin (1987) conducted 30 open-ended interviews with older and younger parents located in Iowa, Colorado, Canada, and Sweden. The majority of interviews were conducted with parents of boys. Many of the parents, who were interviewed, felt that the war play of their children was more aggressive and less creative than the play they had participated in as children. Additionally, parents in the late 1980's felt differently about war play, than parents only five years earlier. Parents reported that their ideas about war play changed as they negotiated the rules of the play with their children, and parents often felt they had little control over ways in which war play came into their homes (Carlsson-Paige & Levin).

Carlsson-Paige and Levin (1987) also asked parents to complete questionnaires on the topic of war play. Fifty-nine questionnaires were completed by parents of 3- to 5-year-old children in four daycare centers. However, parents of boys completed 42 of the 59 questionnaires. All but three boys participated in war play. The boys who did not participate in war play had parents who banned war play. Only five parents reported girls participating in war play, typically with boys. Parents reported that children first became interested in war play between 18 months and 3 years. Many parents had mixed feelings about children's war play. Although two-thirds of parents expressed some discomfort about their children's war play, two-thirds of parents also believed that war play was important to children's development or met a specific need of the children. Parents tried to influence children's war play by setting limits and expressing their own feelings about the play. Parents also redirected war play to other activities, served as models in war play, ignored war play, or got angry about the children's war play. However, 75% of parents allowed their children to play with
toy weapons and action figures. Even parents that did not allow manufactured toy weapons were more accepting of child created weapons. The most common source for children's interest in war play came from television, followed by school, older siblings, and the neighborhood. Two-thirds of parents believed themes for war play came from television programs or commercials, and parents often described children's play as imitative of television images (Carlsson-Paige & Levin).

Costabile et al. (1992) developed a questionnaire for parents based on the questionnaire created by Carlsson-Paige and Levin (1987). The purpose of their study was to assess the attitudes of parents toward their children's war play. Teachers distributed the questionnaires to 316 Italian parents and 84 English parents of children between the ages of 2 and 6 years old. They suggested that the incidence of war play is low. Only 36% of the Italian parents and 57% of English parents indicated that their children participated in war play. The majority of the children were boys who participated in war play once a week to once a month. A lack of interest in war play was the reason most frequently given by parents whose children did not participate in war play. Parents reported that children were most likely to participate in weapon play, followed by war play with combat figures, and acting out war play roles. Similar to the findings of Carlsson-Paige and Levin (1987), Costabile et al. stated that the majority of parents reported that their children became interested in war play between the age of 2 and 3 years old and that their ideas for war play came from television. All parents indicated that the children who were interested in war play were most likely to participate in this activity with other children, but many also indicated that the children played war themes on their own. Parents were divided when asked whether they would discourage war play, allow war play within limits, or allow war play unconditionally. But, parents whose children did not engage in war play were more likely to say that they would discourage war play if their child attempted to participate in it than the parents whose children were engaging in war play. However, most parents agreed that children should not be allowed to bring war toys to
school and that teachers should help children turn their war play into a more constructive activity. Both the Italian parents and the English parents were more accepting of boys playing with toy weapons and combat figures than girls. The English parents were also more accepting of boys watching violent television programs than girls (Costabile, et al.).

Carlsson-Paige and Levin (1987) also sent questionnaires to 16 teachers in three daycare centers. Although the majority of teachers banned war play in their classrooms, "all of the teachers reported that the children in their classroom attempted to engage in war and weapons play" (Carlsson-Paige & Levin, p. 82). Boys were more commonly engaged in war play than girls. Similar to parent responses (Carlsson-Paige & Levin; Costabile et al., 1992), the influence of television was mentioned by almost all teachers who described children's war play in detail. However, two-thirds of teachers were not happy with how they were approaching war play in their classrooms. Carlsson-Paige and Levin also interviewed 42 early childhood professionals, 83% were teachers of children between the ages of 2 and 10 years old. The teachers reported that the children's war play was more imitative and aggressive than it had been in the past. However, this was a biased sample, because Carlsson-Paige and Levin knew that half of the early childhood professionals had concerns about children's war play prior to completing the questionnaires.

During the 1990's interest in children's war play was renewed when a new cartoon, more violent than its predecessors, begin to air in 1993. The television show Power Rangers showed real-life actors who, with the help of special effects, could perform acts previously limited to inanimate cartoon characters (Levin & Carlsson-Paige, 1995). To investigate the effect of the new Power Rangers program on children's war play, Levin and Carlsson-Paige distributed questionnaires to early childhood professionals in 17 states. The questionnaires were completed by 204 teachers working with 2- to 7-year-old children. Ninety-seven percent of the teachers were concerned about the negative effects of Power Rangers on the children in their classrooms. Similar to their findings in 1987, teachers were concerned about
the increase of violence in the classroom and the children's violent, imitative, and less creative play. They also voiced concerns about children's confusion between fantasy and reality, their obsessive involvement with Power Rangers, their overwhelming desire for Power Rangers merchandise, and their identification with Power Rangers as role models for social behavior. Ninety-eight percent of the teachers were also concerned about the increase in children's violence and aggression. Teachers reported seeing aggression in the children's social interactions, artwork, stories, writing, and play both inside the classroom and out on the playground. Several teachers believed that Power Rangers desensitize children to violence and weaken their ability to successfully resolve conflicts (Levin & Carlsson-Paige).

Boyd (1997) questioned the accuracy of the teacher reports of "increased" aggression since deregulation of the broadcasting industry. The concerns of early childhood teachers suggest that war play is a common occurrence in the daily lives of children. Boyd conducted two preliminary studies to investigate the frequency of children's participation in war play. She collected time interval samples of 17 children, ages 3-5 years, in a laboratory preschool. During her month of observation, only 2 boys played superheroes and the time spent in the play accounted for less than 1% of the 300 minutes she observed in play. Similarly, during 6 weeks (B. Boyd, personal communication, June 3, 1999) of observation in a full day child care program, superhero play occurred in only 5% of the play time. Of the 16 children observed, only 4 boys participated in superhero play and not a single child who participated in the superhero play was hurt by another child (Boyd, 1997). Although Boyd's (1997) findings support Costabile's et al. (1992) parent reports of children's infrequent participation in war play, Boyd (1997) did not report on the frequency of either real aggression or pretend aggression in the war play activities that were observed.

Only two observational studies have discriminated between real aggression and the aggression children act out during play activities (Frey & Hoppe-Graff, 1994; Wegener-Spohring, 1989). First, Frey and Hoppe-Graff (1994) investigated the real aggression and
playful aggression of 28 Brazilian children, ages 2-4 years. In contrast to the previous literature on war toys (Goff, 1995; Watson & Peng, 1992), playful aggression was not limited to the context of pretend. Frey and Hoppe-Graff included rough-and-tumble play, play fighting, role playing, and sociodramatic play in their definition of playful aggression. Real aggression was identified when there was evidence that a child's actions were to intentionally harm, threaten, or offend a peer. In addition, three types of real aggression were examined: bullying, reactive aggression, and instrumental aggression. The sample consisted of 14 girls and 14 boys from two nursery schools. One nursery school was located on a university campus catering to middle-class parents. The second school was located in a favela (slum district) providing services for the poor. The children were divided into four groups (seven children in each group) based on sex and setting (girls/favela, girls/university, boys/favela, and boys/university). Each child was observed 12 times, 15 minutes per observation. The observer took notes on children's physical and verbal behaviors including facial expressions and gestures. These notes were transcribed and used to identify and categorize acts of real and playful aggression (Frey & Hoppe-Graff).

Differences were found between the children in the favela and the children at the university. Real aggression was more common among boys than girls in the middle-class setting, but not in the favela setting. Two boys, in the middle-class setting, exhibited aggressive behaviors more frequently than the other children did. The authors suggested that in middle-class nursery schools only some boys, not all boys, are more aggressive than girls. Middle-class girls were as likely as the boys to be victims of aggression. However, in both settings, girls were rarely victims of reactive aggression. Boys in the middle-class setting engaged in more acts of playful aggression than boys in the favela setting. Playful aggression was rare among girls in the university setting. In both settings, girls were rarely the victims in playful aggression. When children participated in playful aggression, both girls and boys preferred boy playmates. However, acts of playful aggression were not always, or even often,
targeted towards a person. All children, except middle-class boys, were more likely to exhibit reactive aggression, followed by bullying and instrumental aggression. In contrast, bullying was the most common form of aggression among middle-class boys. The authors concluded that, for middle-class boys, acts of playful aggression coincide with acts of bullying. Although girls' rates of aggression were low, girls who exhibited frequent acts of bullying were more likely to react aggressively to attacks by others. Furthermore, children who exhibited more acts of playful aggression were also more likely to exhibit real aggression and vice versa than children who did not display acts of playful aggression. "Only in girls is the role of the actor in play related to the roles of the victim in all three subtypes of serious aggression. Being the victim or actor of both bullying and reactive aggression coincides with taking the actor role in playful aggression, while being the victim of instrumental aggression is negatively correlated to playful actor role" (Frey & Hoppe-Graff, p. 266). Although Frey and Hoppe-Graff distinguished between real aggression and playful aggression, their definition of playful aggression included play fighting and rough-and-tumble play. Therefore, the findings may not be consistent with an analysis that excludes play, such as rough-and-tumble play and play fighting, where no overt pretense is observed.

Wegener-Spohring (1989) also discriminated between real aggression and the aggression that occurs during the children's aggressive games. In their study, aggression was classified as either external (i.e., outside the children's play theme) or internal (i.e., within the children's play theme). In contrast to the war play researchers (Boyd, 1997; Gronlund, 1992; Haas Dyson, 1994; Jordan & Cowan, 1995; Paley, 1984) who used small sample sizes, Wegener-Spohring conducted a study in West Germany on children's aggressive games using a relatively large sample size. Wegener-Spohring observed free play in 10 kindergarten classrooms in which war toys were not allowed. Verbatim written records were recorded of the children's play. Themes of destruction and violence were observed and onomatopoeia
vocalizations were common. Similar to Haas Dyson (1994), boys usually played the strong and aggressive roles. Only two times did the researcher observe girls taking on these roles.

Through their written records, Wegener-Spohring (1989) determined that the boys maintained a balance in their aggressive games by regulating the aggressive and frightening play theme so it did not become overpowering and the participants were able to remain in the play. When aggressive acts remained in the "let's pretend" mode, the children continued their friendly interactions. Wegener-Spohring suggested that this reveals that "war can be played in a peaceful, cooperative, and imaginative way" (p. 44). However, real aggression can occur in the proximity of the game. This often happened when children's play became stagnant, was interrupted, or the teacher intervened. The children's bad moods were one sign of real aggression (Wegener-Spohring). Unlike Frey and Hoppe-Graff (1994), Wegener-Spohring excluded play fighting and rough-and-tumble play from their definition of aggressive games, but they did not limit their observations to war play.

In summary, parents reported more boys than girls participating in war play (Carlsson-Paige & Levin, 1987; Costabile, et al., 1992). When girls did participate in war play or aggressive play they typically preferred boys as playmates (Costabile, et al.; Frey & Hoppe-Graff, 1994). According to parents, many children began participating in war play before they were 3 years old and many of their ideas came from television (Carlsson-Paige & Levin, 1987; Costabile et al.). The data from the parent questionnaires and surveys indicated that parents' attitudes toward war play may influence children's participation in war play. Children who did not engage in war play either had parents who banned war play (Carlsson-Paige & Levin, 1987) or would discourage war play if their children attempted to engage in it (Costabile, et al.).

In addition, both parents and teachers reported that children's war play was more aggressive and imitative than in the past (Carlsson-Paige & Levin, 1987; Levin & Carlsson-Paige, 1995). However, other researchers indicated that war play or superhero play was an
infrequent activity in children's daily lives (Boyd, 1997; Costabile, et al., 1992). Furthermore, Wegener-Spohring (1989) found that when children participated in aggressive games, the children regulated the aggression and frightening play themes. Real aggression occurred when a teacher interrupted the play. Finally, Frey and Hoppe-Graff (1994) found differences in children's aggression based on their socioeconomic status (SES).

Options for early childhood educators

In their 1993 position statement on violence, the National Association for the Education of Young Children (NAEYC) suggested that early childhood educators should help children cope with violence by implementing violence prevention in their programs. Early childhood teachers may help to prevent the negative effects of children's participation in war play by how they intervene in children's play and the rules they establish in their classrooms.

In the book "The War Play Dilemma," Carlsson-Paige and Levin (1987) described four options available to early childhood educators for addressing the issue of war play. First, war play can be banned. However, banning war play may encourage children to become deceptive and participate in war play behind teachers' backs. Furthermore, the children's desires to participate in war play activities may produce unwarranted feelings of guilt and anxiety. Finally, it is uncertain whether the developmental needs met by participation in war play can be satisfied when such play is banned (Carlsson-Paige & Levin, 1987, 1988).

Second, teachers can allow unrestricted war play. Although this approach does not lead to feelings of guilt or deceptive behaviors, children's play is in danger of becoming merely imitations of what they have seen, rather than constructions of their new understandings. Finally, neither banning war play or allowing unrestricted war play allows teachers to address the political socialization of children in regard to war and global conflict (Carlsson-Paige & Levin, 1988).

Third, teachers can allow war play, but set limits on space, time, materials and/or social interactions (e.g., no physical contact). This option allows the children to use war play
as a tool for meeting their developmental needs and sets limits to help children feel safe. However, without the teacher's active facilitation of their play, children are left to meet their own developmental needs and develop unguided political and social concepts. "There is no meaningful connection between the ideas children are working to understand through play and the teachers' values and goals" (Carlsson-Paige & Levin, 1987, p. 48).

An alternative approach is for teachers to become an active facilitator of children's war play. Through this approach, teachers allow war play into the classroom when the children initiate it. They observe what the children are working on and actively intervene by expanding on what the children are doing and saying (Carlsson-Paige & Levin, 1988). This allows teachers to help children become more constructive rather than imitative in their play, as well as influences their political ideas (Carlsson-Paige & Levin, 1987).

A few studies have explored the effects of classroom rules and teacher interventions on children's war play (Fortis-Diaz, 1997; Gronlund, 1992; Jordan & Cowan, 1995). Jordan and Cowan conducted an ethnographic study in a kindergarten classroom that prohibited war play. Data were collected by a nonparticipant observer who recorded field notes of the children's behaviors during a free play period once a week. Jordan and Cowan found that rules including no running, no shouting, use equipment properly, no car crashes, and no guns put constraints on children's warrior narratives. Although no action figures or war toys were in the classroom, the children used their imagination to transform the available materials to suit the purpose of their play (e.g., a baby carriage was turned into a car) (Jordan & Cowan).

At the beginning of the Jordan and Cowan (1995) study, boys initiated warrior narratives that involved destruction, fighting, good guys, and bad guys in the doll corner. Story lines included heroes protecting the weak and attacking the bad guys. The boys transformed knives and tongs into weapons and a doll bed was used as a boat (Jordan & Cowan). Jordan and Cowan suggested that the boys were "establishing an accommodation between their needs and the classroom environment" (p. 733). However, the teacher
attempted to control the children's behavior by enforcing a rule of no warrior narratives in the
doll corner and discouraging the transformation of doll corner materials into warrior weapons.
The rule was successful at eliminating warrior narratives including transformations of
materials from the doll corner (Jordan & Cowan).

However, the boys moved the warrior narratives from the doll corner to the
construction area and the car mat (Jordan & Cowan, 1995). The boys invented ways to
continue playing without violating rules about running and shouting. Eventually, as time went
on, there was less acting out of warrior narratives and more talking through warrior narratives
with toy cars and construction materials. Jordan and Cowan suggested that the "warrior
narratives went underground and became part of a deviant masculine subculture with the
characteristic secret identity and hidden meanings" (p. 736). The boys protested to both
teachers and peers that they were not making weapons, guns were transformed into water
pistols, cars were crashed quietly, and swords were concealed under overalls and only used
behind the teacher's back (Jordan & Cowan). Rather than resorting to violence, children
learned to use the classroom rules to gain power over their peers (Jordan, Cowan, & Roberts,
that banning war play encourages children to become deceptive and participate in war play
behind teachers' backs. Jordan and Cowan's study, is the only observational study that has
examined the effect of banning war play on children's play behaviors.

In their informal observations of children in a preschool laboratory program, Ritchie
and Johnson (1982) noticed children's superhero play was more aggressive than their other
play. Although they did not ban superhero play, they reduced the children's interest in
superhero play by structuring rich play environments and elaborating on concepts such as
transportation with field trips, props, and play materials. The children who continued to
participate in superhero play were children who felt powerless, lacked social skills, used
avoidance techniques (e.g., avoid eye contact), and denied their feelings. These children also
found it difficult to move from dramatic play to sociodramatic play. The teachers used positive
 redirection to help the children leave the superhero play and join a new activity (Ritchie &
 Johnson, 1982).

It may be even more important for teachers to help children with behavioral disorders
reduce the frequency of their aggressive play. Sherburne, Utley, McConnell, and Gannon
(1988) conducted a study to examine whether a contingency statement strategy followed by a
time-out for overt acts of aggression or a verbal prompting strategy would be more successful
at reducing aggressive play in the classroom. The participants were 6 children with behavioral
 disorders and 5 typically developing children between the ages of 3 and 5 years old. Data was
collected during two, 20 minute, free play sessions. No violent toys were available in the
classroom. Prior to the experimental conditions, a baseline of the children's aggressive theme
play was established. Following the baseline condition, either the contingency statement
strategy that included a time-out for overt acts of aggression or the verbal prompting strategy
was used during the first 20 minute play period. The other strategy was used during the
second 20 minute play period. The contingency statement strategy consisted of bringing a rug
into the classroom on which children were allowed to play aggressive themes. If children
were observed participating in guns or other aggressive play themes they were asked to play
on the rug. The children were placed in time-out when they displayed overt acts of
aggression. In the verbal prompting strategy, the rug was not available and children were
verbally redirected to play something else. The contingency statement strategy, followed by a
time-out for overt aggressive acts, was found to be more effective at reducing violent or
aggressive play than the verbal prompting strategy. Aggressive theme play was more frequent
and more variable in the verbal prompts condition than in the contingency statement condition
(Sherburne et al., 1988). By limiting war play to a specific area in the classroom or
redirecting children's play, the teachers helped children reduce their participation in war play
(Ritchie & Johnson, 1982; Sherburne et al., 1988), but they failed to address the sociopolitical ideas in the children's play (Carlsson-Paige & Levin, 1987).

Although no systematic studies have been conducted on the active facilitation of children's war play, two kindergarten teachers have provided anecdotal reports (Fortis-Diaz, 1997; Gronlund, 1992). Influenced by Carlsson-Paige and Levin's (1987) suggestion to actively facilitate children's war play, Gronlund (1992) chose to investigate the effects of adopting new rules in an effort to help the children in her kindergarten class understand violence and aggression. The superhero play in the classroom was based on the cartoon Ninja Turtles and involved karate kicking that needed constant adult supervision. She observed that the "children seemed obsessed with repeating the same actions over and over again" (p. 22). She began her endeavor by watching the cartoons and discussing them with the children. Initially, she interviewed the 30 children individually, but the children provided teacher appropriate answers (e.g., "No weapons allowed", "Children should never hurt each other", p. 23), rather than using their own words. She concluded that the children were too young to analyze their own play. However, it is possible that the children's answers were based on the fact that it was their teacher, rather than an unbiased observer, asking the questions. To overcome this obstacle, Gronlund chose to have the children act out stories that she encouraged them to write in journals. Other researchers (Haas Dyson, 1994; Paley, 1984) have also used writing and drama (acting out stories they have written) as a means to explore children's fascination with war play, particularly superhero play. These researchers found that boys were more likely than girls to write about superheroes (Haas Dyson; Paley).

After Gronlund (1992) expressed her interest in the children's superhero play, the children openly chased each other on the playground using the cartoon lingo, rather than secretly expressing this behavior and language. The teacher concluded that she perceived less real aggression, but that the children's fake fighting did result in injury due to their limited
motor skills. Gronlund incorporated "the idea of stunt men and stunt women who practice very carefully and plan fake fights" to counter this drawback (p. 23).

Fortis-Diaz (1997), also a kindergarten teacher, observed the aggressive play of the 24 children in her classroom. She observed that a particular group of boys displayed the most frequent aggressive acts. The boys frequently made guns out of Legos and cube-a-link blocks. To decrease the aggressive behaviors she observed, Fortis-Diaz led group discussions on "what it means to feel safe" (p. 6). As a result of the discussions, she decided to take a more active role in helping the children in her classroom feel safe. However, the children's aggression continued despite her efforts to reduce it. She concluded that the children must not be interested in the toys available in the classroom. Therefore, she implemented a Toy Day to observe how the children's behaviors would change if they were allowed to bring their favorite toys from home to school. However, the boys' aggressive behaviors continued when they brought in war toys that included battleships, action figures, and war planes.

Based on Gronlund's (1992) approach to war play, Fortis-Diaz decided to become active in the children's play. She had daily discussions with the children about their play. She observed that the children's ideas for war play often came from television programs. One group of boys used the television show "COPS" as a resource for their play. Through these discussions, she learned that the children had a very limited understanding of what police officers do. Based on the show "COPS," the children believed that to be a police officer you had to chase and shoot bad guys. Fortis-Diaz tried to expand the children's knowledge by discussing other duties of police officers and also invited a police officer to speak to the class. She tried to redirect the children's aggressive play by suggesting different scenarios and play settings. By placing bad guys in real places with real people familiar to the children, the children were able to make changes in the characters and the characters' actions. The teacher also compared the children's play to story books where the heroes and villains did not use guns. This helped to make the play less imitative and more creative. Fortis-Diaz found that
intervening in the children's play, decreased the children's episodes of shooting and chasing. The boys no longer made guns out of the cube-a-link and the shooting noises and scenes of death decreased (Fortis-Diaz).

Fortis-Diaz (1997) also distributed a play survey to the parents of the 24 kindergarten children to find out how the children's play at home differed from their play in school. The majority of the children (89%) preferred to watch television during their free time and all the children enjoyed cartoons. Over half (56%) of the children watched television everyday. Although only 22% of parents stated that their children became more aggressive after watching violent television programs, 44% reported that their children responded with shock, fear, or sadness to televised acts of aggression. Only 17% of parents monitored or did not allow their children to watch aggression on television. Half of the children acted out television shows with action figures. Twenty-two percent of children played violent video games and owned toy weapons (Fortis-Diaz).

The findings of these studies demonstrate that the teacher's approach to war play can affect the type and amount of real aggression or pretend aggression that is exhibited by children in the early childhood classroom. Banning or limiting war play changes where and how children express war play in the classroom (Jordan & Cowan, 1995), but these methods of reducing children's war play do not ensure children's developmental needs are met or sociopolitical ideas are addressed (Carlsson-Paige & Levin, 1987). Helping to facilitate war play may decrease aggression, influence children's values, and foster children's ability to think of alternatives for solving conflicts both in play and in the world (Carlsson-Paige & Levin, 1987, 1988, 1990; Fortis-Diaz, 1997; Gronlund, 1992). However, a number of variables that influence children's play and the level of aggression they exhibit need to be considered (Jenvey, 1988).
Factors Associated with Aggression and Children's Play

Jenvey (1988) suggested that children's play can be influenced by several variables including the characteristics of children, the social environment, and the physical environment. The following paragraphs will address the variables of sex, age, socioeconomic status, peer status, and teacher interventions as they relate to children's aggression and play.

Gender differences in aggression

Many researchers have found that boys exhibit more aggression than girls (Farver, 1996; Huesmann et al., 1984; Kupersmidt et al., 1995; Sanson & DiMuccio, 1993; Wegener-Spohring, 1989; Williams & Schaller, 1993) including pretend aggression (Boyatzis, 1995; Boyd, 1997; Carlsson-Paige & Levin, 1987, 1990; Costabile et al., 1992; Watson & Peng, 1992). Using an event sampling technique, Farver observed and recorded the aggressive episodes of 64 four-year-old children. She found that boys' aggressive behaviors were more likely to be linked to the escalation of playful aggression than girls' aggressive behaviors. Preschool boys also "approached and watched" their peers who were behaving aggressively, whereas girls were more likely to comment about the peers' aggression (Farver).

Nonetheless, girls can and do exhibit aggression. For example, Williams and Schaller (1993) observed the dominance strategies of 20 children, ages 4 and 5 years old, on the playground of a child care center. Although boys were more likely to fight over a toy, the most violent struggle in their study occurred between a boy and girl (Williams & Schaller). Furthermore, when researchers included relational aggression (i.e., harming others' peer relationships) as well as overt aggression, boys and girls were equally identified as aggressive (Crick & Grotpeter, 1995). Crick and Grotpeter used peer nominations to assess the social adjustment of 491 third through sixth grade children in four schools. The children were asked to nominate three classmates for each of the following areas: relational aggression, overt aggression, prosocial behavior, and isolation. Crick and Grotpeter found that girls were more
relationally aggressive than boys and boys were more abusive and overtly aggressive than girls.

In conclusion, both girls and boys participate in all types of aggression. However, boys are more likely to participate in overt aggression and pretend aggression, whereas girls are more likely to participate in relational aggression.

Developmental change in patterns of aggressive behavior

Both frequency and patterns of aggressive behavior change over the course of children's development. The frequency in type of aggression changes from instrumental aggression at about age four, to an increase in verbal and hostile aggression during middle childhood and early adolescence (Hartup, 1974).

During the preschool years, the amount of aggression increases reaching a peak at age four (Hartup, 1974). Farver (1996) suggested that younger children may appear to be more aggressive than older children, because of their frequent participation in instrumental aggression. Farver observed that aggression exhibited by 4-year-old children most often occurred in conflicts over objects, territory, or access to privileges. She found that among preschool children, aggression occurred in 45% of peer disputes, 33% of escalated playful aggression, and 14% of accidents (Farver).

Coie et al. (1991) also found that younger children are more aggressive than older children during middle childhood. In their study to investigate the relationship between aggressiveness and peer rejection of first grade and third grade African American boys, first grade children were more aggressive than third grade children, making the first graders more often the targets of aggression. According to Coie et al., boys identified as aggressive in the first grade were more likely to be targets of bullying and to escalate aggressive episodes than boys identified as aggressive in the third grade (Coie et. al.).

In summary, children's real aggression, particularly instrumental aggression, increases during the preschool years. In middle childhood, instrumental aggression decreases and verbal
and hostile aggression increase (Hartup, 1974). More research is needed to determine the
developmental path of pretend aggression.

The relationship between aggression and socioeconomic status

Researchers have found that children from low SES families tend to display more
aggressive behaviors than children from middle-class families (Dodge, Pettit, & Bates, 1994;
Kupersmidt et al., 1995; Ramsey, 1988; Spivack & Shure, 1974). For example, Kupersmidt
et al. (1995) found that childhood aggression and peer relations are related to the context of
the child's neighborhood. Kupersmidt et al. collected peer nomination questionnaires from
445 low SES children and 826 middle-class children. To measure aggression, the elementary
school children were asked to nominate children who fight a lot. Asking children to nominate
children they liked and children they did not like identified rejected children. Finally, the
children were asked to nominate children they played with in their neighborhood and children
they played with at home.

Kupersmidt et al. (1995) found that low income African American children living in
single parent homes in low SES neighborhoods were the most aggressive of all groups of
children and were more aggressive than low income African American children living in
middle-class neighborhoods. The least aggressive children were middle income white children
regardless of their household composition. In contrast to findings that boys are more
aggressive than girls (Farver, 1996; Huesmann et. al. 1984; Sanson & DiMuccio, 1993;
Wegener-Spohring, 1989; Williams & Schaller, 1993), Kupersmidt et al. found that middle-
class white boys were no more aggressive than middle-class white girls.

Similarly, Dodge et al. (1994) found that children's "externalizing problems decrease
linearly with an increase in SES" (p. 655). Dodge et al. interviewed the mothers of 585
children from kindergarten, first grade, second grade, and third grade classrooms. The
interviews assessed the children's exposure to violence, the stability of their peer groups, their
family's life stressors, their mothers' social support, and the harshness of discipline they
received. The mothers also completed a questionnaire to assess their values regarding the use of aggression to solve problems. In addition, two in home observations were conducted to assess the mothers' warmth and the environmental cognitive stimulation in the home. Finally, children's externalizing or aggressive behavior problems were assessed by teacher ratings and peer nominations. They found that children in lower SES classes are more likely than their peers to experience harsh discipline, to observe violence in their neighborhoods and extended families, to receive less cognitive stimulation in their home environment, and to have more transient peer groups and fewer opportunities for stable friendships (Dodge et al., p. 662). Furthermore, the SES of the children was found to predict teacher rated and peer nominated child behavior problems in school. Dodge et al. suggested that the "socialization experienced by children at the relatively low ends of the socioeconomic spectrum is the type that seems to be a breeding ground for aggressive behavioral development" (p. 662).

The evidence reviewed indicates that children from low SES families participate in more real aggression. In addition, children from low SES families have been found to use more aggressive strategies and less reassurance and sharing than children from middle-class families (Ramsey, 1988). However, it may be possible that boys from middle-class families participate in more pretend aggression than boys from low SES families (Frey & Hoppe-Graff, 1994).

The effect of aggression on peer relationships

Children's aggression has been found to affect their relationships with peers (Cairns, Cairns, Neckerman, Gest, & Gariepy, 1988; Crick & Grotpeter, 1995; Dumas, Blechman, & Prinz, 1994; Graham & Hoehn, 1995). Researchers have found that the majority of children do not like to play with children who are aggressive (Cairns et al.; Crick & Grotpeter; Dumas et al.; Graham & Hoehn; Pellegrini, 1989). For example, Dumas et al. (1994) divided 98 first, second, and third grade children into an aggressive group and a nonaggressive group based on teacher ratings of the children's behaviors, communication effectiveness, social competence,
and school adjustment. Teachers, peers, and the children themselves completed sociometric ratings to assess peer acceptance. The peer ratings and teacher reports revealed that aggressive children were less desirable playmates than nonaggressive children. Nonetheless, when the aggressive boys completed the sociometric ratings for themselves, they did not see themselves as less desirable playmates (Dumas et. al.).

Similarly, Crick and Grotpeeter (1995) found no difference between relationally aggressive boys and nonaggressive children in their perception of peer acceptance. However, girls who were relationally aggressive reported less acceptance by their peers than boys who were relationally aggressive or nonaggressive children (Crick & Grotpeeter).

Even though children who are overtly aggressive may not see themselves as less accepted by their peers, children do identify and develop negative attitudes toward children who exhibit aggressive behaviors. Graham and Hoehn (1995) conducted a study to differentiate aggression and social withdrawal using attributional constructs. African American children from low income families in grades 1, 3, 5, and 6 participated in the study. An experimenter read a story involving a child with aggressive characteristics and a child with withdrawn characteristics. Then the experimenter used a rating scale to ask the children (1) whether the character in the story was responsible for his behavior, (2) whether they felt sympathy and anger for the story character, and (3) the likelihood that they would help the story character and want to be his friend (Graham & Hoehn).

Graham and Hoehn (1995) reported that by age five, children were able to differentiate peers who were aggressive from those who were withdrawn, and often preferred withdrawn peers as friends over aggressive children. In addition, young children perceived aggression like a sin that deserved anger and rejection. Aggressive children were often perceived by their peers to be responsible for their behaviors, deserving of little sympathy, and were less likely to be preferred as friends. However, older children felt more pity for the story characters even the boys that were aggressive (e.g., starting fights and getting into trouble) than toward a
withdrawn story character. Furthermore, the children in grades 3, 4, 5, and 6 presumed that aggressive peers had higher self-esteem than shy/withdrawn children, but first graders presumed lower self-esteem for aggressive peers (Graham & Hoehn).

Several researchers have explored the relationship between children's aggressive behaviors and their sociometric status (Crick & Grotpeter, 1995; Dodge, 1983; Parkhurst & Asher, 1992). Both girls and boys rejected by their peers are often aggressive (Dodge). Crick and Grotpeter used peer nominations and group administered assessments to assess the social adjustment of 491 third through sixth grade children in four schools. They found that rejected and controversial children were more overtly aggressive and relationally aggressive than popular and neglected children. However, controversial status children were the most relationally aggressive of all groups (Crick & Grotpeter). In contrast, aggression has not been found to be a characteristic behavior of popular children (Dodge; Parkhurst & Asher; Pellegrini, 1989).

Farver (1996) suggested that children who are aggressive tend to lack the social skills needed to maintain satisfactory relationships with their peers. Dodge (1983) conducted a short longitudinal study to investigate the development of sociometric status in peer groups. Fifty-six second grade boys, who were initially strangers, formed play groups that met for 8 sessions, each session lasting 1 hour. The interactions of the boys were observed and videotaped. After the eighth session, sociometric interviews were conducted to assess peer group status. In addition, the physical attractiveness, rated by undergraduate students, and peer perceptions of each boy were analyzed. Dodge (1983) found that rejected boys engaged in less social conversation, more aggressive behaviors (e.g., hostile verbalizations, excluding peers, hitting peers), and inappropriate play than the average boy. Rejected boys engaged in a higher frequency of social interactions involving aggression, rough-and-tumble play, and inappropriate behaviors than their peers and only a “low proportion of their behavior involved
cooperative play and social conversation, behaviors that have a relatively low probability of receiving negative responses” (Dodge, p. 1397).

Although aggressive children tend to be rejected by the larger peer group (Cairns et al., 1988; Crick & Grotz, 1995; Dodge, 1983), researchers have found that aggressive children are not rejected by all social circles (Cairns et al., 1988; Farver, 1996; Parkhurst & Asher, 1992). Reciprocated friendships were found among 4-year-old aggressive children. Farver used an event sampling technique to investigate the aggressive episodes of 64, four-year-old, children. Aggressive episodes were observed and written in narrative form. Teachers completed ratings on the children's social competence, behavioral styles, and temperaments. To identify the children's social networks, teachers were asked to nominate the children's friends. Farver found that preschool children who were involved in a high percent of aggressive incidents had more reciprocated friendships than children who did not participate as frequently in episodes of aggression. Among preschool children, those who held a central position in their social cliques were more aggressive than those who were identified as peripheral, secondary, or isolated. For example, "highly aggressive boys generally played in groups of three or four, they were very active and disruptive of peers' activities, and their playful aggression frequently escalated into hostile or instrumental aggression" (Farver, p. 345). Farver also found that the level of aggression among preschool cliques was similar, except for cliques in which all members were girls.

Similarly, Cairns et al. (1988) studied the social networks and aggressive behaviors of 220 fourth grade students and 475 seventh grade students in seven public schools. They identified 40 highly aggressive children based on the nominations of school personnel and a matched control group of 40 nonaggressive students. The students were interviewed to assess social networks including social clusters, social isolates, and best friends. Students were also asked for the names of children who have bothered them, caused them trouble, or made them mad. In addition, the students and classroom teachers rated the students' aggressiveness,
popularity, affiliation, and academic competence. Based on the analysis of peer clusters and the reciprocal selection of best friends, Cairns et al. found that aggressive fourth grade and seventh grade boys and aggressive seventh grade girls are most likely to be friends with other aggressive children. Although aggressive children were found to be less popular among their larger peer network, they were just as likely as matched control subjects to be identified with a social cluster, to be named as a best friend, and to have reciprocated friendships (Cairns et al.).

In summary, children who participate in aggression are not well liked by the majority of their peers, but they are able to make friends with other aggressive children (Cairns et al., 1988; Farver, 1996). Similarly, children who participate in pretend aggression are likely to play with other children who enjoy this activity (Fortis-Diaz, 1997).

The effect of teachers on children's aggression

The teachers' personal characteristics, behaviors, classroom rules, and expectations can have an impact on children's tendencies to exhibit aggressive behavior in the classroom. For example, teachers may contribute to children's aggressive behavior if they offend children by distributing unjust punishment, displaying favoritism, or labeling a child as deviant. Labeling children as deviant may lead to self-fulfilling prophecies with children's behaviors meeting the expectations of the teachers (Frude, 1988). In addition, teachers have a tendency to judge children from low SES families, more negatively than children from middle-class families. This may contribute to the tendency of low SES children to be more aggressive than middle-class children (Ramsey, 1986).

Teachers may also treat children who are at risk for aggression different than other students in the classroom. Van Acker, Grant, and Henry (1996) examined the reciprocal relationships between teachers and children who were at a moderate risk or high risk for exhibiting aggressive behaviors. The participants included 25 teachers and 206 elementary school children from grades 2, 3, and 5. Eighty-two percent of the teachers were women.
Children included in the study received scores on both teacher ratings and peer nominations that indicated they were at risk for aggression. The identified children were divided into a mid-risk group or high-risk group based on their percentile rank for aggression. There were 102 children in the mid-risk group and 104 children in the high-risk group. The high-risk group contained a disproportionate number of boys and African-American students. The teachers' behaviors and children's behaviors were observed in the school setting. Each child and corresponding teacher were observed for a minimum of two, 20 minute periods in the fall and again in the spring. The teachers' behaviors and children's behaviors were coded using a continuous data collection procedure at the time of the observation. Lag sequential analysis was used to make probabilistic statements about the children's behaviors and teachers' behaviors (Van Acker et al.).

Although Van Acker et al. (1996) found no difference in the display of aggressive behaviors, children in the high-risk group displayed more positive and negative interactive behavior than children in the mid-risk group. Children in the high-risk group received more behavioral requests and reprimands from teachers than children in the mid-risk group. Children in the high-risk group exhibited more noncompliant behavior than children in the mid-risk group. When the children in the mid-risk group displayed aggressive or negative behaviors, teachers responded with reprimands followed by redirection in the form of a behavior request that led to student compliance. Although teachers responded with reprimands to the aggressive and negative behaviors of the children in the high-risk group, they were less likely to follow the reprimands with a redirection. Instead, the children in the high-risk group responded to teacher reprimands with noncompliance and negative behaviors. In addition, teachers were more likely to praise the children in the mid-risk group for correct responses than the children in the high-risk group. Mid-risk students also had more opportunities to give a correct response and thus receive more praise (Van Acker et al., 1996).
In conclusion, the teachers provided children at high-risk for aggression with more behavioral requests and reprimands, but less redirection and praise than children at mid-risk for aggression (Van Acker et al., 1996). This differential treatment by teachers may contribute to the children's risk for aggression rather than reduce it.

Additionally, how a teacher responds to aggression in the classroom will determine whether the aggression increases or decreases. Researchers have demonstrated that if a teacher reacts passively to children's aggression in the classroom, the aggressive behaviors increase (Berkowitz, 1958; Levin, 1955; Sherburne et al., 1988). For example, Levin (1955) individually observed 225 kindergarten children in a projective doll play situation to explore the influence that a teacher's high or low dominance control has on young children's aggressive acts. Prior to the doll play situation, the teachers in the children's classrooms were rated as exercising low dominance control or high dominance control. During the doll play situation, the children were individually given an opportunity to tell a story with dolls in the presence of an adult who was permissive to children's acts of aggression. Levin found that boys whose teachers exhibited low control in the classroom were more aggressive during the first of two doll play sessions than boys whose teachers exhibit high control in the classroom. Furthermore, the aggression of the boys coming from high teacher control classrooms increased during a second doll play session. In addition, less fantasy aggression was expressed during the doll play sessions by girls coming from high teacher control classrooms than the girls whose teachers exhibited less control in the classroom. Levin concluded that a decrease in children's fantasy aggression occurs in classrooms where teachers exhibit high dominance control.

However, Harden and Jacob (1978) discovered that children have different expectations for a teacher's behavior depending upon if they are male or female. They divided 30 boys, aged 4-6 years, into one of three experimental conditions. In one condition, the boys observed a film of an adult male reacting passively to a fight between two children. In the
second condition, the boys viewed an adult female who intervened in a fight between two children. In the final control condition, the children viewed a cartoon. In pairs, the boys viewed one of the films. Following the film, they were observed in a 20 minute play session in the presence of the adult they had seen in the film. An observer recorded the children's real aggression and playful aggression. Harden and Jacob found that the aggressive behaviors of the children increased when a female adult was passive to the aggression that occurred during the course of their play. However, the children's aggressive behaviors remained low in the presence of the adult male, even though the adult male behaved passively within the play session. This study supports Harden and Jacob's previous experimental finding that children perceive adult males as more likely to intervene in aggression than adult females.

A challenging task for early childhood teachers is to implement successful interventions that decrease the aggressive behaviors in the classroom. Educators have used several successful interventions. Behavior modification techniques including positive reinforcement and rewards for appropriate behavior have been successful at decreasing aggression and increasing prosocial behaviors (Ellis & Blake, 1986; Petermann, 1987). Aggressive behaviors can also be controlled temporarily with time-out techniques (Petermann; Slaby, Roedell, Arezzo, & Hendrix, 1995).

Social skills training can reduce children's aggression by increasing the number of alternative behaviors that are available to them (Ellis & Blake, 1986). By teaching children to be assertive, cooperate, and share, aggression in the classroom can be decreased (Levin, 1994; Slaby et al., 1995). Teaching conflict resolution strategies also leads to more social competence and less aggression in the classroom (Benton-Murray, 1994; DeMasters & King, 1994). For example, after teaching conflict resolution skills to 22 kindergarten children, DeMasters and King found that the children were able to solve problems by themselves with little or no help from the teacher.
Aggression and disruption in classrooms have also been reduced using comprehensive violence prevention programs (Benton-Murray, 1994). These programs teach several social skills along with lesson plans that focus on understanding and respecting diversity (Benton-Murray; Levin, 1994; Slaby et al., 1995). After implementing a violence prevention curriculum with 25 kindergarten children, aged 5-7 years, Benton-Murray found that incidents in her classroom needing teacher intervention decreased from 10 per day at the beginning of the program to 2 per day at the end of the program. The children could successfully solve conflicts using the nonviolent and prosocial skills they had learned (Benton-Murray).

The teacher is a powerful influence on children's behaviors in the classroom. The teacher's behaviors, rules, and choice of curriculum can help children increase prosocial skills and decrease aggressive behaviors or contribute to an increase in aggression and disruptive classroom behaviors. It may be just as important for teachers to monitor their own behavior as well as the behaviors of the children in the classroom.

**Summary**

Should teachers and parents support or discourage children's pretend aggression? Theories on aggression provide contradictory answers. Cathartic theory suggests participating in pretend aggression should decrease children's tendency to behave aggressively in the future (Dollard et al., 1939; Feshbach, 1956). However, the social learning, cognitive-neoassociation, and social cognitive theories suggest that observing and participating in aggression, even fantasy aggression, will increase the likelihood that children will behave aggressively (Bandura, 1973; Berkowitz, 1984; Huesmann 1988; Huesmann & Eron, 1984, 1989).

Many ideas for children's pretend aggression come from television programs, particularly cartoons (e.g., Carlsson-Paige & Levin, 1987; Costabile et al., 1992; Gronlund, 1992; James & McCain, 1982). The empirical evidence that is available indicates that there is a relationship between viewing violent television and aggressive behavior (e.g., Boyatzis et al.,
In addition, there is some evidence that playing with war toys leads to more aggression than playing with non-violent toys (Goff, 1995; Potts, Huston, & Wright, 1986; Watson & Peng, 1992). Given these findings, it is not surprising that "viewing aggressive cartoons and then playing with the associated aggressive toys would lead to more aggression and less prosocial behavior than viewing the neutral cartoon and playing with it's associated toys" (Sanson & DiMuccio, 1993, p. 97).

Teachers and parents have reported an increase in children's aggression since the deregulation of the broadcasting industry (Carlsson-Paige & Levin, 1987). However, little is known about the real and pretend aggression that children exhibit when they act out war themes in dramatic play without aggressive toys. Although Frey and Hoppe-Graff (1994) found that children who exhibit more acts of playful aggression are also more likely to exhibit real aggression and vice versa, their definition of playful aggression included rough-and-tumble play and play fighting, as well as pretend aggression. In addition, preliminary findings suggest that the incidence of war play in early childhood settings and at home is low (Boyd, 1997; Costabile et al., 1992).

Furthermore, war play is primarily an activity that is embraced by boys (Carlsson-Paige & Levin; Haas Dyson, 1994; Jordan & Cowan, 1995; Paley, 1984; Sutton-Smith, 1988; Wegener-Spohring, 1989). Wegener-Spohring (1989) found that when aggressive acts remained in the "let's pretend mode," the boys continue their friendly interactions. Wegener-Spohring also found that boys maintain a balance in their aggressive games by regulating the aggressive and frightening play themes so it does not become over powering and the participants remain together in play.

Although Wegener-Spohring (1989) observed that children displayed real aggression when teachers interrupted children's aggressive games, others have observed a decrease in aggression when teachers and parents intervene in play (Costabile et al., 1992; Gronlund,
However, it is unknown whether it is more beneficial to ban children's war play, limit the war play, or facilitate children's war play. Finally, future research should consider variables that influence children's play including the characteristics of the children, the social environment, and the physical environment (Jenvey, 1988).
CHAPTER 3. METHOD

The purpose of this study was to describe the real and pretend aggression exhibited by children in a full-day kindergarten classroom. The main objective was to discover the sequence of aggressive episodes and how children executed aggressive acts within the real and pretend aggression that naturally occurred during the course of free play. In addition, teacher behaviors were examined to determine how teachers intervened when aggression occurred within the context of reality or in the world of make-believe. The second objective was to interview the children and the classroom teachers. The combined goal of these objectives was to gain a fuller understanding of the difference between children's real and pretend aggression and how teachers intervened in both real and pretend aggression. The following questions were explored to investigate children's aggression:

**Guiding Questions**

1. How are children exhibiting both real aggression and pretend aggression?
2. How do the children react to real aggression and pretend aggression?
3. What is the frequency of real aggression and pretend aggression?
4. What are the characteristics of children who frequently participate in real aggression and pretend aggression?
5. How did the teacher intervene in real aggression and pretend aggression?

**Design**

An ethnographic approach was used to investigate the real and pretend aggression that naturally occurred during free play in the kindergarten classroom. Ethnography is a “thick description” of culture (Geertz, 1973). The ethnographer participates for an extended period of time in people's everyday life experiences. The ethnographer observes what happens, listens to what is said, and asks questions (Hammersly & Atkinson, 1995). Data are collected to understand how participants perceive, interpret, and represent their daily lives (Bogden & Biklen, 1982). The process of the ethnographic design is continuous rather than
predetermined. The ethnographer does not approach the culture with a hypothesis to test, but is continuously asking questions, collecting data, making ethnographic records, and analyzing data (Spradley, 1980). The research problem and questions are developed through the review of the literature and participation in the setting (Hammersley & Atkinson, 1983). Observations, interviews, field notes, and audio taping or video taping are used to collect data that inform the researcher about the issues being examined (Hammersley Atkinson, 1995).

Based on the research problem and questions, the observer selects and interprets information within the context of the culture (Hammersley & Atkinson, 1983). Data are analyzed inductively; the theory is grounded in the data as pieces of data are gathered and grouped together (Bogdan & Biklen, 1992). It is then expected that themes will emerge through the identification of recurring patterns and events in the process of this analysis (Spradley, 1980). Finally, the culture is described through selected presentations of examples from the data (Hammersley & Atkinson, 1983).

This ethnographic study was conducted within the naturalistic or qualitative paradigm. In the naturalistic paradigm, phenomena are studied in ways that are sensitive to the setting and undisturbed by the researcher. The main goal is to describe what happens in a particular setting, the perceptions of people's behaviors, and the context in which those behaviors occur. In the naturalistic paradigm, the social world is not understood in terms of simple causal relationships or universal laws; rather it is assumed that human actions are based upon social meanings that include rules, beliefs, values, intentions, and motives (Hammersley & Atkinson, 1995). Because human behavior is studied within the context of the culture in the naturalistic paradigm, it is important for researchers to learn the social meaning of the culture they study (Hammersley & Atkinson, 1983). To understand behavior, an approach must be used that allows researchers to access the meaning that guides behavior. The goal of the ethnographer is to acquire the knowledge of the culture in the process of learning how to participate in it.
The ethnographer learns to understand behavior by learning the culture and interpreting the world in the same way as the people in the culture (Bogdan & Biklen, 1992).

Assumptions

The goal of the naturalistic paradigm is to portray, interpret, and understand human behavior (Schwandt, 1989). Phenomena must be studied within their natural settings, because the naturalistic paradigm assumes realities are multiply constructed (Lincoln & Guba, 1985). According to the naturalistic view, people are continuously interpreting the events that unfold in their lives and shape their behaviors. The process of individual interpretations of the social world leads to multiply constructed realities. The same event "can mean different things to different people and to the same people at different times" (Hammersley & Atkinson, 1995, p. 7). Because prior theories cannot account for the multiple realities that are constructed, the naturalistic paradigm assumes that the theory is grounded in the data (Lincoln & Guba, 1985). Throughout the data collection process, the researcher assumes the research problem and questions can be developed, changed, and expanded (Hammersley & Atkinson, 1983). Themes and categories emerge from this process that reveal patterns in the daily lives of the participants (Spradley, 1980).

In ethnography, a researcher must assume cultures exist and "all perspectives and cultures are rational" (Hammersley & Atkinson, 1983, p. 13). From the data collected, the researcher assumes she can select data judged to be cultural (Hammersley & Atkinson, 1983). Finally, the researcher’s previous experience in the setting and the participants' documents are assumed to be informative and are considered when interpreting the data (Bogdan & Biklen, 1992).

Limitations

Limitations exist when people are the instruments of an investigation (Lincoln & Guba, 1985). Although participant observers take in a broad spectrum of information, the data they collect are selective and based on their own interpretations (Hammersley & Atkinson, 1983;
Spradley, 1980). Recorded descriptions of the culture are derived from the point of view of the participant observer. These descriptions are limited by the ethnographer's own past experiences, values, activities, thoughts, and feelings (Lincoln & Guba, 1985; Spradley, 1980).

Because this study examined specific people in particular settings at one point in time, the generalization of findings to other populations is limited (Hammersley & Atkinson, 1983). However, judgments may be made regarding the cultural elements that may transfer to similar settings (Guba, 1981).

Trustworthiness

The validity and reliability procedures relied upon when a "true" single reality is assumed are not appropriate within the naturalistic paradigm which assumes that reality is multiply constructed (Lincoln & Guba, 1985). However, credibility, transferability, dependability, and confirmability of the research findings do need to be addressed.

Techniques including prolonged engagement, persistent observations, triangulation, and member checks are used to increase the internal validity and credibility of ethnographic studies (Guba, 1981). Through prolonged engagement in the classroom, researchers become a natural part of the setting. This enables them to learn the classroom culture and build trust with the teachers and students (Lincoln & Guba, 1985). This long term involvement allows them to test the perceptions and biases of themselves and others (Guba).

Persistent observations in the classroom allows researchers to identify the setting elements and characteristics that are most relevant to their investigation (Lincoln & Guba, 1985). Observations include typical as well as atypical details relevant to the study, but information not pertinent to the investigation are excluded (Guba, 1981).

Triangulation of observations, interviews, field notes, and audio taping are used to cross-check the data and interpretations. A comparison of the data from these different sources increase the credibility of the findings (Guba, 1981).
Several times throughout the data collection process, researchers ask classroom participants to participate in member checks, which function as a continuous test of the data collected and the interpretations drawn from classroom observations (Guba, 1981; Lincoln & Guba, 1985). Member checks consist of verbally checking perceptions with the participants to confirm that the researchers' interpretations are consistent with those of the participants. These checks help to capture the participants' own ways of interpreting the events in the classroom (Bogden & Biklen, 1992). Through these checks, the researcher obtains a better understanding of the participants' intentions and can correct errors in the data collection or interpretations, and confirm findings (Lincoln & Guba).

Because the study is specific to particular people within a specific context, it is not generalizable to an entire population. However, transferability of the findings within similar contexts is possible. Transferability is obtained through purposive sampling and thick descriptions of the aggressive episodes (Guba, 1981). This sampling and description procedure allows others to compare the early childhood classroom to similar contexts and make judgments about the possibility of transfer (Guba; Lincoln & Guba, 1985).

Triangulation and an audit trail are used to address the dependability or reliability of the case study. Because methods overlap when triangulation is used, a weakness in one method was compensated for by the strength of another (Guba, 1981; Lincoln & Guba, 1985). The audit trail includes the process by which the data were collected and analyzed. The researcher documents the data collection and interpretations, including interview notes. Transcripts of the research meetings can be included as part of this audit trail in an effort to further address confirmability or objectivity. This audit trail is available as evidence that data do exist to support the researchers' interpretations (Guba; Lincoln & Guba).

**Participants**

The participants in the classroom included 20 children (10 girls and 10 boys), a head teacher, a student teacher, and two graduate student assistants. The children ranged in age
(years-months) from 5-2 to 5-11 with a mean age of 5-5 at the time of enrollment. Fourteen of the children were White (6 boys, 8 girls), five were Asian (4 boys, 1 girl), and one was an African-American girl. The majority of the children were from middle-class families and 50% had parents who traveled to the United States from other countries. Pseudonyms (false names) were used to protect the identities of participants. Episodes of real and pretend aggression of all 20 children were targeted for inquiry. The comprehensive ethnographic study was approved by the University Human Subjects Review Committee.

Setting

The setting for the comprehensive ethnographic study was a kindergarten laboratory classroom located on the campus of a large university in a medium size Midwest community. The curriculum and assessments used in the kindergarten were based on developmentally appropriate practices for early childhood education. In addition, the teaching staff strive to use teaching strategies supported by research.

The classroom was also a practicum site for college students studying child development and early childhood education. College students from two courses participated in the classroom on a weekly basis. An observation booth was also available to parents and college students, so they could observe the children without disrupting the classroom environment.

In addition, the classroom served as the location for an afterschool program. Every day children from several elementary schools were bussed to the laboratory school to participate in the afterschool program. Several children from the laboratory school's kindergarten program also attended.

Procedures

This study was part of a larger comprehensive ethnography of a full-day kindergarten conducted in the 1997-1998 school year. In the fall semester of 1997, I was a participant observer in the kindergarten classroom. The objective of my study was to examine children's
aggression; therefore, I tried not to participate in instruction, discipline, or other activities related to the role of teacher. I recorded field notes that included descriptions of the verbal and physical behaviors of teachers and children, as well as my own subjective comments and interpretations. In addition to the field notes, I audio recorded the activities in the classroom during self-selection. I carried a General Electric mini-compact cassette recorder with me as I walked from activity to activity in the classroom. I participated in the classroom from 8:30 A.M. to 12:00 P.M. on Monday, Wednesday, and Friday of each week throughout the months of August, September, October, November, and December for a total of 48 days or approximately 144 hours.

The data set included field notes, 45 90-minute audio cassettes, and 52 video cassettes (2 cassettes were used per day, one for each camera). The classroom was videotaped by three undergraduate students on a predetermined schedule (see Appendix A) throughout the semester for a total of 26 days. One undergraduate student videotaped the classroom on Monday and Friday mornings from 8:30 A.M. to 11:30 A.M., a second undergraduate student videotaped the classroom on Monday and Friday afternoons from 12:30 P.M. to 3:00 P.M., and a third undergraduate student videotaped the classroom on Wednesdays from 8:30 A.M. to 12:00 P.M. and from 1:00 P.M. to 2:00 P.M. Outside play was videotaped only on Fridays and quiet time was videotaped only on Wednesdays. The video recording of the classroom was accomplished through the use of two wall mounted cameras and 6 microphones that hung from the ceiling of the classroom. These cameras and microphones were in the classroom before the school year began and remained in the classroom throughout the entire year. Outside play was recorded using a portable camcorder.

Members of the research team participated in weekly meetings every Friday from 3:00 P.M. to 4:00 P.M. The meetings were facilitated by two Early Childhood Education professors who were the principal investigators of the comprehensive ethnography. At these meetings we discussed schedules, video equipment procedures and/or problems, and shared
our observations and interpretations of the classroom. These meetings were taped and transcribed.

On the fifth and eighth of December 1997, I interviewed the children about their favorite toys, television shows, and the rules their families had about toys and television. Formal interviews with the head teacher were conducted by the research team on December 10, 1997 and on April 29, 1998. Finally, to clarify information and check the accuracy of interpretations, I questioned the participants in the classroom on an as needed basis.

Separate interviews with the children, graduate assistants, and five of the children’s parents were conducted by members of the research team in the spring semester. These interviews, as well as three formal interviews I conducted with the head teacher in 1996, were pertinent to the current study and have been included in the final data set (see Appendix B for interview questions). Quotes from the field notes and interviews were written verbatim so the reader could “hear” the voice of the participants.

In addition, a sociometric test was individually administered to the children at the end of the fall and spring semesters to examine social status. The head teacher and parents were also asked to complete the Social Skills Questionnaire (Gresham & Elliot, 1990). These quantitative measurements were obtained for the larger comprehensive study of the kindergarten, but were not included in the final analysis of the current study.

**Instruments**

"Qualitative research has the natural setting as the direct source of data and the researcher is the key instrument" (Bogdan & Biklen, 1992, p. 29). As the participant observer, I was the instrument in this study (Lincoln & Guba, 1985). My responsibility was to learn how to participate in the culture of the classroom. My goal was to understand the participants’ behaviors as I learned the culture and began to interpret the world in the same way as the people in the culture. According to the naturalistic paradigm, my status as a
marginal participant in the culture allowed me to construct an account of the classroom culture as a natural phenomena (Hammersley & Atkinson, 1995).
CHAPTER 4. ANALYSIS AND INTERPRETATIONS

The purpose of this study was to describe the real and pretend aggression exhibited by children in a full-day kindergarten classroom. The main objective was to discover the sequence of aggressive episodes and how children executed aggressive acts within the real and pretend aggression that naturally occurred during the course of free play. In addition, teacher behaviors were examined to determine how teachers intervened when aggression occurred within the context of reality or in the world of make-believe.

According to Geertz (1973), "most of what we need to comprehend a particular event...is insinuated as background information before the thing itself is directly examined" (p. 9). Therefore, the following sections include descriptions of the classroom environment, the classroom teachers, the kindergarten children, and the researcher to provide the reader with the context in which the aggression occurred. This section concludes with the analysis and interpretations of real and pretend aggression.

Classroom Environment

The kindergarten classroom was a large (30' 23" x 33' 35") square structure, with a high ceiling, bright fluorescent lights, and an elevated rectangular balcony (30' 23" X 6' 21.5"). The floor was covered with a light gray tile, with a blue area rug in one corner. In the middle of the room there were four child sized tables and matching chairs. Outside in the hallway, there was an easel with current information for parents, a green bench for those who arrived early, a laundry basket for sack lunches, and a bulletin board with additional information about the classroom and the teachers.

Starting at the door in Figure 1 and moving clockwise around the room, there was an information desk for parents. On this desk there was a sign-in sheet, a list with the children's names, a class schedule, a lunch sign-in sheet, work examples, pencils, and Kleenex. A chalkboard was hanging on the wall next to the information desk, and a red carpet or a gray mat laid between the parent information desk and a sink. There were plastic containers in the
Figure 1. Diagram of the kindergarten classroom

sink and soap, Dixie cups, and paper towel dispensers hung on the wall next to the sink. In front of the sink there was a water table with two child size chairs. A storage closet with "DOOR" written on it in block letters and a poster of cleaning guidelines for illness were next to the sink. On the other side of the storage closet there was a pencil sharpener and dirty laundry baskets filled with hats, scarves, and rugs. Brooms and mops were also located in this corner of the room.

Art supplies were located on two shelves along the back wall in front of the balcony. Next to these shelves there was a large plastic garbage can full of scrounge material including boxes, paper, and plastic scraps. The children's paintings were pinned onto a wire clothesline hanging from the ceiling or a clothesline hanging along the back wall.

Next to the art area, there were two tables designated for the help-yourself snack area. One table faced the art shelf and the other faced the balcony. A white utility cart was located next to the table facing the art shelf. On the bottom shelf of the utility cart there was a tray for dirty dishes. A posterboard with 40 pockets, 20 blank and 20 with check marks written on
them, was used by teachers and children to keep track of which children had snacks or had thought about having snacks. Help-yourself snacks were available from 8:30 a.m. to 10:00 a.m. At 9:50 a.m., a teacher gave the children a snack reminder before snack was closed. For example the teacher announced, "10 more minutes until snack is closed."

There was a shelf for storage next to this snack area. On top of the shelf there was a cage with a hamster named Chloe. Next to Chloe's cage there were shells, a birds nest, pine cones, and animal cards. Across from this shelf, in a corner of the room, there were two computers stored in metal cabinets. Boxes were stored on top of these cabinets.

Along the wall, next to the computer cabinet, there was a shelf with puzzles and bins filled with manipulatives. There was also a large rectangular storage shelf for the afterschool program. This shelf faced the wall. The kindergarten children did not have access to it without a teacher's permission. On top of this shelf there were plants and books. On the back of the shelf facing the blue carpet there was a traditional calendar, a linear calendar, two table seating charts for work and lunch time, rules for lunch and quiet time, and two signs indicating which children were to leave for home after kindergarten and which were to go to another classroom for the afterschool program.

Under the calendars there were three paper pockets with the words yesterday, today, and tomorrow written on them in block letters. In addition, there was a blue mat with pockets representing each day of the week and there were colored buttons in each of these pockets. The teachers’ names were clipped to the pockets with a clothes pin. This system was used to indicate which days each teacher led a group. On the wall above the afterschool program's storage shelf there were four windows.

An adult sized rocking chair was located on the blue carpet. Along one edge of the blue carpet, there was a shelf filled with blocks. A music center, composed of a shelf with a phonograph and a compact disc player for the teachers to use, sat on the opposite edge of the blue carpet. Next to this shelf there was a larger shelf used to store a globe, the teacher's
mailboxes, and bins with Legos, wooden furniture, and toy people. The bathroom was located in the corner of the room, behind these shelves.

Twenty-one cubbies were located along the wall between the bathroom and the door to the classroom. Paper and teacher supplies were in bins located on top of the cubbies. Directly above the cubbies was a darkly screened window for students and parents to view the classroom from an observation booth.

An elevated balcony was located on the opposite side of the room. On the balcony's staircase banister there was a paper clock set at 1:00 and a signup sheet. By signing up on this sheet, the children took turns reading to the class as they were gathered on the brown carpet at the bottom of the steps. To the left of the staircase, on the balcony wall, there was a schedule for the college student participants and the teachers' schedules with hand drawn pictures of each teacher. Hooks with aprons and smocks were lined horizontally along this wall. This part of the balcony was very small and was used as a private corner with pillows and blankets. In the opposite corner, there was a shelf with teacher supplies and fire and tornado signs were posted by the door to the outside playground. On the balcony there was a dramatic play area, a storybook corner, a writing center, and a table with the children's mailboxes. The dramatic play area included a shelf with dishes, a refrigerator filled with plastic food, a stove, and a sink. There were also dolls, doll beds, a small rocking chair, a table, three chairs, and dramatic play clothes located on shelves, racks, and in bins. The story book corner included books with matching cassette tapes, a tape recorder, and head sets. The writing center consisted of two tables with paper, pencils, and stamps. On the wall, adjacent to the children's mailboxes, there was a poster with the pictures and names of the children in the class and a chalkboard. Finally, along the edge of the balcony railing was a tee-pee, a yellow bench, a laundry basket full of papers, and large wooden blocks used as shelves for storing reading and math materials. The daily schedule of the full-day kindergarten is outlined in Table 1.
Table 1. Daily schedule of the full-day kindergarten

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:45</td>
<td>Self-selection</td>
<td>Children can choose what they want to do from activities that include: blocks, manipulatives, sensory activities, computer, listening center, writing center, participatory bulletin board, art supplies, a dramatic play center, scrounge, help-yourself snack, and some teacher directed activities.</td>
</tr>
<tr>
<td>9:45-9:55</td>
<td>Clean-up</td>
<td>Activities in the room are put away and the children gather on the blue carpet.</td>
</tr>
<tr>
<td>9:55-10:15</td>
<td>Large Group</td>
<td>Large group begins with a transition time, a song, and then the class as a group talks about a topic, a theme (e.g., identity), or about some thing that happened during self-selection. Finally, the teacher gives the children directions for a work activity.</td>
</tr>
<tr>
<td>10:15-10:45</td>
<td>Work Activity</td>
<td>Children work individually on the teacher directed work activity at assigned tables.</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>Quiet Time</td>
<td>Children sit on the blue carpet and read a book, put a puzzle together, or play with manipulatives that are stored in bins on a shelf next to the blue carpet, until everyone is done with their work activity.</td>
</tr>
<tr>
<td>11:00-11:15</td>
<td>Clean-up/Brown Carpet</td>
<td>The children are asked to clean-up and then come to the brown carpet at the bottom of the steps to the balcony. The class discusses the calendar, a child's project, or other pertinent business.</td>
</tr>
<tr>
<td>11:15-11:45</td>
<td>Outside</td>
<td>Self-selection. Children are free to choose from activities that include swings, jungle gym, wooden climber, metal climber, sand box, sleds, shovels, balls, tree climbing, dramatic play, chase games, tricycles, and wagons.</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Transition</td>
<td>The children listen to recorded stories or act out the stories with little rubber figures. Children also take turns setting the table for lunch.</td>
</tr>
</tbody>
</table>
Table 1. (continued)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00-12:30</td>
<td>Lunch</td>
<td>Children sit at the four tables located in the middle of the room and eat nutritious meals.</td>
</tr>
<tr>
<td>12:30-1:00</td>
<td>Quiet Time</td>
<td>Children rest on mats and may choose to read stories to themselves.</td>
</tr>
<tr>
<td>1:00-1:15</td>
<td>Transition</td>
<td>The teachers and children read together using big books.</td>
</tr>
<tr>
<td>1:15-2:00</td>
<td>Small Group</td>
<td>Children are divided into three small groups that focus on math, emergent literacy, and large muscle or project work.</td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Transition</td>
<td>The class discusses what happened during the day and how they feel about it. Children are allowed to share their favorite parts of the day or show their work.</td>
</tr>
<tr>
<td>2:15-2:35</td>
<td>Outside</td>
<td>Self-selection. Children are free to choose from activities that include swings, jungle gym, wooden climber, metal climber, sand box, sleds, shovels, balls, tree climbing, dramatic play, chase games, tricycles, and wagons.</td>
</tr>
<tr>
<td>2:35-2:40</td>
<td>Clean-up</td>
<td>The children put away activities in the classroom and begin getting ready to end the day.</td>
</tr>
<tr>
<td>2:40-2:45</td>
<td>Day Ends</td>
<td>The children who go home sit on a green bench outside the room. The children participating in the afterschool program go to the blue carpet and have a short 5 minute transition until the afterschool person comes to get them and takes them down to the library.</td>
</tr>
</tbody>
</table>

Classroom Teachers

The teachers who participated in the study were connected to the university as employees and/or students. They were all women with various degrees of education in the field of early childhood. The teachers are introduced in the following paragraphs.
Sara

The head teacher, Sara, is a 48-year-old Caucasian American employed by the university. Sara had been involved in early childhood education since 1975. Sara’s philosophy of early childhood education was based on her education and experiences working with children. In 1975-1976, Sara was in a national service organization called Volunteer In Service To America (VISTA). This program is similar to the Peace Corps, but based within the United States. "VISTA places individuals with community-based agencies to help find long-term solutions to the problems caused by urban and rural poverty" (Friends of VISTA, 1989). Through this program, she was sent to a Head Start umbrella agency for disseminating VISTA volunteers on the upper west side of Manhattan. The umbrella agency placed her in a parent cooperative daycare center that had the reputation of being one of the best. Sara explained that highly educated and somewhat wealthy parents started the cooperative. She said, "It was a group of parents with a voice that forged a philosophy about what they believed about young children [based on] their vocations and their role as parents" (Interview 101796). Sara's experience at this daycare and her graduate education at a private school in Boston were important to how she thought about the education of young children and how she constructed her role as head teacher in the classroom.

Respect, compromise, and ideas were important to Sara’s philosophy of early childhood education. Sara learned to incorporate respect of children into an early childhood program when she worked at the parent cooperative daycare center in New York. In an interview, she described incidents that helped her to understand the importance of respecting children and staff. Sara explained,

The parents who founded it (i.e., the parent cooperative daycare) taught at the Teachers College of Columbia and at Bankstreet College of Education, so they had this really strong philosophy of how children should be treated...When I got there for my first day, they were gathering these 18 children to walk to the park which was five blocks away. They start walking to the park and all of a sudden, this child just plops down in the middle of the sidewalk and says "I'm not going any farther because so-
Sara's dedication to helping children learn to make compromises came from this experience working in New York, as well as from her graduate education. She said, "I ended up doing my thesis on how children make compromises" (Interview 121097).

In the classroom, Sara also encouraged children to share their ideas. Sara explained that she was introduced to the importance of children's ideas at a lecture she attended while at a workshop in Vermont. Sara said,

A woman from Harvard came as a guest speaker, she was Piaget's translator...in Paris, and she talked about children and science. She said "If we want children in the future to solve things that we can't even think of, our job is to respect children's ideas and build on them so they can become thinkers." And she wrote this book called The Having of Wonderful Ideas. So, I decided to take a year off and go to Harvard to study with her. I studied with Eleanor Duckworth. I thought that I better respect children's ideas. That's the bottom line. (Interview 121097)

Sara not only valued the concepts of respect, compromise, and ideas, but she incorporated them into her curriculum on a daily basis through her interactions with the children, the teachers, and the college students who participated in the kindergarten. Sara showed great consideration and care for everyone who entered her classroom.

Sara's philosophy on war play. Similar to other early childhood classrooms (Carlsson-Paige & Levin, 1987), war play was banned in the kindergarten. The kindergarten children were not allowed to play with created or manufactured toy weapons. Any item that resembled a weapon or shot any type of material in a war play manner was banned. For example, if a child, used a squirt bottle as a gun and tried to convince Sara that the bottle shot water or milk rather than bullets, Sara said she would say, "You know what, we're really not
having guns that shoot other things either" (Interview 110796). The children in the kindergarten class were taught to respect the "no guns in school" rule.

Sara believed it was important for children to understand why guns were not allowed in the classroom. In the interview, she explained, "Children need to know there are reasons for what we do, that people don't do things haphazardly in the world. So when we have rules, I try to talk to the children about why we have them" (Interview 101796). In the past, Sara used the concept of safety to explain why guns were not allowed in school. She learned to talk to children about guns when she taught at the cooperative daycare center. Sara explained what she learned to say to the children:

People who really use guns have to practice with targets to learn to be really safe with them. People who use guns, they have to think of all these other things to keep people safe other than using a gun. So the truth is guns are things that people have to be really careful with, so what we decided to do at our school is not play with guns, but think about how to respect them. ...Guns are closed. (Interview 101596)

Sara explained to children that they were not allowed to play with guns at school, because guns were not safe. She implied they were dangerous and that people need special training to keep people safe without using guns. Sara said, "Guns are closed." She used the term closed to communicate that an item or an area of the room was not a choice for play. Guns were not a choice for the children to play with in this classroom. Sara also agreed it was important to explain to children that guns hurt people, and no hurting people. Given this explanation, it was clear that Sara banned guns because they were not safe. This idea for banning war play supports the sociopolitical theory (Carlsson-Paige & Levin, 1987), because Sara connected pretend war play to real life violence. She was nonetheless, open to the possibility of other philosophical views on war play. In an interview she said,

...I know NAEYC has published curricula and things about guns that are not exactly the same as the way I talk about guns, so if a teacher wanted to use another strategy in the school, I would listen to that teacher and learn from it and if I needed to, I would change my mind. (Interview 110796)
Although Sara banned war play in the classroom, she agreed with the developmental theorists (Carlsson-Paige & Levin, 1987) that children learn about concepts through play, including war play. She said, "I believe...that all cultures have ideas about good and bad...[that] there are these universal themes of fear and saving. ...One of the ways that people figure that out is through playing about good and bad" (Interview 101796). Sara suggested that through play, children can act out their feelings and learn values based on the concepts of good and bad. This supports the developmental theorists claims that war play offers children the opportunity to distinguish good from bad, right from wrong, and fantasy from reality (Carlsson-Paige & Levin, 1988).

Sara also agreed with the developmental theorists' views that children do not always bring the same meanings to their play that adults do. She believed that children do not always understand the meanings of the things they say and do. She recalled an experience from her own childhood to clarify this point. In an interview, she said,

I can remember growing up and we had this thing that we used to say outside, we had no idea what it meant, we'd say bombs away for Putokyo and we used to throw something out of a tree, an apple tree. We had no idea what it meant. Now I know what it meant, bombs away for Tokyo. It was about bombing Tokyo. It was about the atomic bomb. I had no idea what it meant. So, some of that stuff positive things can still come out of it, so children don't always know what they are doing. (Interview 101796)

Sara believed that there were many reasons why a child may behave aggressively or participate in pretend aggression. She said,

I think the children that participate in aggressive play are the children who are sometimes really active, their temperament is to be active, and their body needs to move so their play can get out of control. Not because they are being aggressive, but because they don't know how to set safe boundaries on their behavior and they need a teacher to help them with it or to channel it in a positive way. Sometimes children whose play is aggressive, are children who don't know how to use words, so they act out with their bodies and they hit someone or they are mad that nobody is playing with them. They're not using their words, so they are acting out their feelings with their bodies. (Interview 101596)
Sara also suggested that children act out what they see in their environment. If children see or experience physical abuse or emotional abuse in the family they may act it out in the form of aggressive play. Older aggressive playmates or rebellious teenagers may also be models for pretend aggression. Finally, she believed that the television children watch contributes to pretend aggression. Sara said, "Children who watch Power Rangers may act out what they've seen on TV" (Interview 101596).

Safety was one reason Sara discouraged war play activities in the classroom. In an interview, Sara said, "In our school, it's our job to keep people safe and not let people get hurt" (Interview 110796). Sara also believed that stories can teach children important values and provide alternative ways of thinking about characters traditionally thought to be evil. In an interview she explained,

I believe that we can instill values by reading about myths. The other day, another teacher gave me a book about pirates, about a really tough pirate who is fighting. In part of the book, the pirate got hurt and started crying and everybody somehow started supporting the pirate and that pirates can cry. So, I might start reading books about that to give children ways to start thinking of other alternatives. (Interview 110796)

Rather than ignore the children's interests in war play, Sara suggested offering children alternative play choices or asking them to use divergent thinking skills to create their own alternatives. The no gun rule was one way Sara structured the kindergarten environment and the children's play to discourage war play. She explained an alternative activity she had suggested to children in the past.

...What we decided to do at our school is not play with guns...Some things that seem interesting to children are hitting things with targets. So if you want to get the bean bags, let's get the bean bags and you can throw the bean bags at a target. So that's what we do. Guns are closed. (Interview 101596)

Through alternative activities, Sara balanced the children's need for safety and the need to participate in play. In this example, Sara offered an alternative activity in which she believed a child may be interested. It had some elements of the gun activity (e.g., target
Shooting. The alternative activity was important because, according to the developmental theorists, "play, including war play, is a primary vehicle through which children work on developmental issues" (Carlsson-Paige & Levin, 1987, p. 17). Developmental theorists believe war play may contribute to a child's sense of power, control, and mastery. Perhaps by introducing alternative activities, teachers can help children achieve their developmental goals and decrease the amount of aggression they act out in war play scripts (Carlsson-Paige & Levin, 1988). In the following excerpt from an interview, Sara explained how she could take a child's interest in guns and turn it into a positive learning experience:

...we could take that interest [using squirt bottles as guns] and make it into a positive safe way. So if they want to have squirt bottles they can trace letters out on the pavement with a squirt bottle. It's important to pay attention to what children like to do. There is a reason they like to do it and how can we focus it in a positive way. So if they are running and hiding inside, I might say, let's play hide and go seek outside. Don't forget to ask me. And you hide and I'll chase you or something like that. So get them to do it in a positive safe way. (Interview 110796)

Sara believed that children's ideas are very important; therefore, teacher directed activities were not always needed to redirect their attention away from war play. Kindergarten children are quite capable of coming up with their own ideas for alternative activities. Sara described an incident that happened when three boys from a past class were playing guns as follows:

I said, "Guns are too scary. I want you to think of something else to make other than a gun." And they just immediately said, "Okay we'll make a communicator or walkie talkie." They were happy as long as they got to make some kind of electronic communicative powerful device. A big alternative is some kind of walkie talkie system. They love that! So, if they use scrounge or wires to make a phone to talk to each other that would be just as exciting as having a gun. (Interview 110796)

In the above example, Sara implied that guns were not safe and encouraged the children to think of an alternative activity. The children had no problem finding creative ways to use the available materials to make a walkie talkie system that was as exciting and powerful
as a gun. As the narrative illustrates, children can create exciting and powerful alternatives to weapons. They do not always need a teacher to suggest an alternative activity to them.

Sara used a problem solving approach to teach the children to make compromises, which are important alternatives to the use of aggression. Sara explained how she could relate the compromises that children make in the classroom to the compromises used by politicians during times of war. She said,

...just like children need to make compromises in kindergarten, big people have to learn how to make compromises about things that they’re fighting about. So, the same time that the people are fighting in this war, they are sitting down to make compromises so they don’t need to fight anymore. (Interview 110796)

This comparison may help to dissipate children's misconception that governments only use violence to resolve issues of conflict and gain peace in the world. Through this discussion Sara addressed political values using the concept of compromise, and in the process helped the children understand that nations stop fighting because of compromises they make, not solely because of the violence that resulted from the war. Others have also suggested that children develop linkages between war and social interpersonal conflicts (Cooper, 1965).

Sara believed in taking time to observe the children and to talk to them about their play. She used discussions in an effort to discover where ideas for play originate and what they mean to the children. Sara made guidance decisions based on these observations and discussions. In the following interview, Sara talked about what she could do and say if she observed war play in her classroom:

...what I did was listen for a while to what the children were saying. And what I might say is, "How did you think to do this?" I try to find out about where it’s coming from and how they are thinking about it before I decide what to do. So if they say they heard about this on TV or they saw it on TV, so, I believe children play out things that they are scared of or having around them. I might say to them, "What does your family say about this?" I might say something like, "I feel scared when I see people fighting, I feel sad when people fight, sometimes people fight. Why do people have wars? But in our school, it's our job to keep people safe and not let people get hurt." (Interview 110796)
Rather than immediately disrupt children’s play, Sara chose to listen to what they said and asked questions about how they thought to play the game, before she decided what to do. Through her observations of children’s play, Sara determined how to approach the subject with the children to let them talk about their frightened or sad emotions. Sara believed that kindergarten children were old enough to talk about war and violence. However, she did reinforce the rule that war play was not an acceptable behavior in the kindergarten classroom.

In summary, although Sara banned war play in the classroom because of safety concerns, she believed that war play can be a medium for children to learn values and act out feelings. She used observations and discussions with children to learn where their ideas originated and what their war play meant to them. Finally, she helped children redirect their war play by suggesting alternative activities.

Kate

The student teacher was a 23-year-old Caucasian American undergraduate student, completing a student teaching practicum in the classroom in order to obtain a degree in early childhood education. Kate had long, blonde hair and blue eyes. She participated in the kindergarten classroom the first eight weeks of fall semester. When asked about the student teachers in her classroom, Sara said, "I think Kate's a really good teacher. I think she has a good understanding of learning at a deep level" (Interview 042998).

Pam

Pam was a Caucasian American graduate student with a 20-hour a week assistantship in the kindergarten. She was in her mid-twenties and had short, bobbed, brown hair, and brown eyes. Although Pam had previously worked in the laboratory school, this was her first experience teaching children in a kindergarten. In an interview, Pam said, "I had always interacted with children one-on-one, so it was hard for me to come into the classroom with 20 children" (Interview 030698). Pam believed that programs for children should be developmentally appropriate and include classroom management techniques such as
appropriate communications, logical consequences, and time-out. Pam agreed with Sara's teaching style. Pam commented, "I think Sara's a really good example of fair teaching. She allows the children to do what they are capable of doing. I found that when working with her, I picked up a lot of her mannerisms" (Interview 030698).

Tara

Tara was an Asian graduate student, from Taiwan, with a 20-hour a week assistantship in the kindergarten. She was in her mid-twenty's and had long, black hair, and black eyes. English was her second language and she was very soft spoken. Similar to Pam, Tara also believed programs for children should be developmentally appropriate. She said, "Each child, even though they have a certain development stage, but they still have an individual difference" (Interview 040198). In addition, she believed a curriculum should be based on individuals' interests because, "Sometimes they come with different interests, so we will look at that and think about some curriculum that we can relate to their interests and that will enhance learning" (Interview 040198).

The two graduate assistants' participated in the classroom 20 hours a week, on an opposite schedule, to ensure that at least two teachers were in the classroom at all times. The graduate assistants' worked together with the head teacher and the student teacher to plan and implement classroom activities.

Kindergarten Children

The children ranged in age (years-months) from 5-2 to 5-11 with a mean age of 5-5 at the time of enrollment. Thirteen of them were Caucasian (6 boys, 7 girls), six were Asian (4 boys, 2 girl), and one was an African-American girl. The majority of the children were from middle-class families and 50% had parents who traveled to the United States from other countries (see Table 2).
Table 2. The children and parents place of origin and the number of siblings in the family

<table>
<thead>
<tr>
<th>Name</th>
<th>Country (Child/Parent)</th>
<th>Younger Brother</th>
<th>Older Brother</th>
<th>Younger Sister</th>
<th>Older Sister</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy</td>
<td>USA/USA</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<td>Carla</td>
<td>Taiwan/Taiwan</td>
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<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Evan</td>
<td>Russia/USA</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Eve</td>
<td>USA/USA</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Jasmine</td>
<td>USA/USA</td>
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<td>1</td>
<td>0</td>
<td>1</td>
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<td>Jill</td>
<td>USA/England &amp; Egypt</td>
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<td>1</td>
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Many of the parents were undergraduate students, graduate students, or college professors associated with the university. Other parents were employed in the local community, outside the university system. Sara, the head teacher, suggested that parents of the children in her classroom spend a considerable amount of time with their children. In an interview, Sara said, "They might be stressed because of being busy with their work, but they are very interested in their children. And they might not have a lot of money because they are students, but they're not financially totally struggling, they have a place" (Interview 101796).

Almost half of the class participated in the laboratory preschool the year before they entered kindergarten. In an interview Sara said, "This is the first year I've had 9 children come
from Lab A. Amy, Kathy, Scott, Ted, Keith, Sam, Pete those are the people I can think of off
the top of my head" (Interview 121097).

The majority of the children in the kindergarten class had exceptional academic skills
and several were involved in extracurricular activities. Many of the children came into the
classroom with the skills needed for the first grade (e.g., knowledge of beginning consonant
sounds, a sight word collection of 10-20 words, writing and recognizing the numbers one
through twenty, invented spelling). Sara commented as follows on the children’s skills near
the end of the school year:

These kids are so bright. They loved sight words, maybe what first graders would
typically do. They can talk about what a short vowel sound is versus a long vowel
sound. There are some kinds of kids that can understand that level. Same with
addition and subtraction. More formal things. They can do abstract things. Everyone
has those skills [needed for the first grade] under their belt except Evan, because he is
developmentally young. (Interview 042998)

A “thick description” of each child is presented in the paragraphs below to help the
reader visualize the participants and to understand the dynamics of their interactions.
Knowing who the people are in the setting contributes to the understanding of the phenomena
under investigation (Geertz, 1973).

Amy

Amy was a Caucasian American girl with long ash blonde hair and blue eyes. She was
part of a large family and her father was employed by the university. The year before she
went to kindergarten, Amy attended the university’s preschool program. Amy was a bright
child who could read and write a few words. In an interview Pam said, “She loves to spell
and will write out words for anybody. Every day I’m here, she’s asking me to help her spell a
word...She’s real creative too, when it comes to activities” (Interview 030698). Amy enjoyed
diverse activities ranging from dolls and housekeeping to sports and superheroes.
In the classroom, Kathy was her best friend, but she also played with Ted and Evan. She enjoyed being a leader and having control over play. In an interview Pam, a graduate assistant, commented on Amy's attitude,

Even though she has older brothers and sisters, she comes to school with this attitude—don't tell me what to do...When she's done something wrong, it's hard to get her under control. She'll run away from you, or you'll try to get her to do something else and she won't. She loves to know she's important and responsible. (Interview 030698)

Tara, the other graduate assistant, also mentioned Amy's defiant behavior. Tara said, "She knows the rules, but sometimes she just kind of tests you" (Interview 040198).

In an interview Sara, the head teacher, said, "I thought she was very bossy and never really had a friend. She's a very assertive person. She still tends to play with Kathy the most, but Kathy stands up to her. I see Amy more as having a sense of self, more independent, and more self worth. She's a great leader (Interview 121097). When I asked about Evan's relationship with Amy, Sara said, "Amy can still control him. She's not going to play with Jill. Scott was the one who said, 'I don't want her controlling us'" (Interview 121097). At the end of the year Sara said, "Socially her strength is that she can be more flexible and doesn't have to be the boss all the time now. She's a good little organizer of groups" (Interview 042998).

Carla

Carla was an Asian girl with shoulder length black hair and black eyes. She traveled with her parents and two brothers to the United States from Taiwan. Her younger brother participated in the afternoon preschool class, but he often played in the kindergarten classroom in the morning when his mother brought Carla to school. Carla was quite intelligent, she could read and write some words, and play the piano. In an interview Sara said, "Carla is bright in terms of her sight word collection" (Interview 042998). However, she was a perfectionist and she could get very frustrated if she thought her work was inferior to that of her peers. In an interview Sara said, "I want Carla to be more assertive because she can be really timid. I want her to have a sense of some kind of power" (Interview 121097).
Although Carla played with Nina, their relationship was tarnished by frequent conflicts and they often needed the teachers’ help to make compromises.

Evan

Evan was a Caucasian boy with brown hair and blue eyes. He lived for two years in an orphanage in Russia before being adopted by his American parents. He had an older sister from whom he picked up typical elementary school jokes and sayings. He used these sayings at inappropriate times. In an interview, I asked Sara about Evan’s unusually silly comments. Sara said, “He has an older sister that’s nine. He gets some of his things from his sister” (Interview 121097). In a separate interview Pam said, “...He's really a fun child to work with, but some of the things that come out of his mouth...I just don't know what to say to him.”

Evan had a cleft pallet when he was born and did not have an operation for it until the age of two, after he was adopted by his American parents. As a result, Evan had frequent ear infections that Sara speculates caused him to yell very loud in the classroom because he could not hear himself. Sara said, “...with the cleft pallet there's some kind of membrane that separates this cavity from the ear cavity. It's thinner than usual with a cleft pallet. So, the infection goes back and forth. ...When he has ear infections he's all plugged up and things echo. He was making these screeching noises. I'm not sure if that's Evan's way of saying that his ears hurt” (Interview 121097).

Although Evan was one of the oldest children in the classroom, developmentally he was the youngest. Sara said, “When I think about Evan, he reminds me exactly of a 4-year-old. ...I see him as a 4-year-old. Some 4-year-old children need a teacher to assist that person and that's how I see Evan. His work is exactly as a 4-year-old, his ability to hold a pencil (Interview 121097). He also has developmental delays in reading and writing. Near the end of the school year Sara said, “He knows all of his beginning consonant sounds, but I would still recommend that he go to kindergarten again next year” (Interview 042998).
However, Evan could be very social and he enjoyed playing with the other children. Pam said, "As far as social skills, he's good" (Interview 030698). Pam noticed that Evan's social skills have developed over time. She said, "I have been very surprised with him. Like yesterday, we were outside playing football, and he was making all the rules, telling people what they should do. I didn't think the other children would follow his directions, but they did. ...He's not really a follower, but he floats in and out of activities" (Interview 030698). In a separate interview Sara said, "His social strength is that he's so social" (Interview 042998).

Evan had a limited attention span and disruptive behaviors that interfered with his learning and the learning of his peers. The teachers tried very hard to help Evan manage his own behaviors. In an interview Sara said, "I've talked to Evan more about having an internal sense of self-control" (Interview 121097). Tara explained the strategies she used to help Evan manage his behaviors during large group. Tara said, "I try very hard to think about a way to help him to learn better or help to keep him in school because sometimes, especially like group time, he have a hard time to sit down and concentrate. ...Also during group time, usually we say laps are closed, but for Evan, somehow they are open for him. When he sit on your lap, sometimes he can get calm" (Interview 040198).

The teachers spent much of their time with Evan. Pam commented, "I spend most of my time down there with him because he needs a lot of attention. Evan hasn't reached the developmental level of most of the children. He has a hard time controlling his excitement" (Interview 030698). Pam discussed the guidance strategies the teachers used with Evan. She said,

At the beginning of the year, Sara would remove him from the children—take him to the hallway—because it was too distracting to the other children. But then he would find something to do out there, so we tried to get him to the other carpet. I try to distract him. When he screamed out, I took him to the balcony and held him on my lap. I find that works great. If I can touch his hand or leg, that works great. Sara would try not looking at him, but then that didn’t work. When he gets ear infections, it seems like his behavior is worse. (Interview 030698)
Pam also commented that they take away privileges as a means of guiding his behavior. A strategy that Tara uses is to, "Lead him to do something else over to other activity" (Interview 040198). In an interview, Sara described her strategies for working with Evan. Sara said,

I just had to be prepared for Evan going squeak, and if I didn't look at him, took his hand, not hold him, and just sat him on a chair out in the hall, and then the minute he was calm brought him in. That would work for me but not anyone else. He gets out of control easily. It's so much easier to just keep him under control with me. I don't have enough time and individual attention; it's easier to get him under control with my group. This is what it takes to get Evan under control. He's like throwing his shoes and screaming. Then you say something like, "Look at that light. I wonder how it broke." You have to distract him because he's like a little physics principle. A body that's out of control stays out of control. You have to have a distraction. I think what happens with Evan is he doesn't know what to do with his feelings. I think he acts them out. He was almost whining, but to tell you the truth I thought that whining was progress for Evan because he was actually saying what he wanted. (Interview 042998)

Sara said, "I don't understand all the complex dynamics of Evan. He needs one, firm teacher. One of the things I talked about with his mother about choosing a laboratory school for Evan, it might not have been the best match for him" (Interview 042998).

**Eve**

Eve was a tall Caucasian American girl with blonde bobbed hair and blue eyes. Her parents owned a flower shop in the community and contributed resources from their business to the classroom. Eve was very social and had good relationships with her peers. The children valued her ideas. Tara commented, "When she has an idea she won't hesitate to say that. So other people think that's a good idea. They will agree about it" (Interview 040198). In an interview Sara said, "Eve...she really likes people. She can be very kind to people" (Interview 042998). Pam agreed, "Eve is really sweet. I think that if a child wanted something, and couldn't get it, Eve would get it for them. She's very good about sharing" (Interview 030698).

However, Eve could be very secretive and sneaky. Occasionally she would take other children's candy or eat candy she brought from home with friends in the bathroom.
Nevertheless, she listened well to the teachers and was easy to redirect. Pam said, "If we catch her doing [something], she responds real well" (Interview 030698).

She often played with Jill, Scott, Kevin, Lynn, Karen, and Jasmine. In the spring, Jill and Eve became best friends. When discussing Eve's role in the classroom, Pam said, "She's a leader. She's one of the girls who interacts a lot with the boys. She makes time for all. She plays with the boys for awhile, then moves on to the girls" (Interview 030698). Tara agreed, "She's the person who plays with both boys and girls" (Interview 040198).

**Jasmine**

Jasmine was an African-American girl with black hair and brown eyes. She usually wore her hair braided. She lived with her mother, a university student, and two older siblings. Jasmine also had a special relationship with the student teacher Kate. In an interview Sara said, "At the beginning of the year, she attached to Kate, who was a student teacher" (Interview 042998). She remembered Kate as a teacher at the daycare center she attended in the summer. Kate and Jasmine often spent time together playing with the pet hamster. Tara commented, "Chloe (hamster), she loves that. When she have that hamster out, she is kind of calm" (Interview 040198). Jasmine was also interested in writing, reading, and painting. She was the best reader in the kindergarten class and she could also write a few words. Sara said, "Jasmine is a wonderful reader... At the beginning of the year she was a good reader, but she could not write, form letters well. She couldn't make numbers, couldn't cut" (Interview 042998). Tara agreed, "Jasmine, she will read maybe the hard one. She do most of her reading, but sometimes she ask me 'How do you read this, how do you say this word,' because she not every word she knows, but yeah we encourage her to do it" (Interview 040198).

Jasmine began the school year playing with Eve and Karen, but she became more of a loner as the year progressed. Jasmine found it difficult to make and keep friends. She also had a conflict with Ted that hurt their relationship and the way they interacted the remainder
of the year. In an interview Tara said, "She doesn't want to work with people. She doesn't want to make negotiations. When she has a conflict with other children she just doesn't want to listen or talk, you know just kind of be bossy and cry" (Interview 040198). At the end of the year Sara said, "I think she'll be happy in first grade. She loves being at a desk with a workbook. She needs her own space. She needs a really direct structure. She'll have a hard time at recess" (Interview 042998).

Jill

Jill had long, wavy, dark blonde hair and brown eyes. She dressed very feminine and often wore barrettes or head bands in her hair. Jill lived with her parents and three siblings. Jill's mother was from England and her father was from Egypt. Jill played with Karen at the beginning of kindergarten, but developed a stronger relationship with Eve toward the middle of the kindergarten year. All the children liked Jill and many wanted to be her friend. In an interview Tara said, "She's easy going. She care about other people...She's so sweet. Easy to talk to her and she also will follow you and ask questions and also she is very, kind of good friend to everybody. Like to help people" (Interview 040198). In a separate interview Sara said, "Jill is a great worker and very bright. She focuses on her work. A good beginning reader. She loves life. Her little eyes are always shining. She's so kind to people" (Interview 042998). When the teachers were asked who was the most popular girl in the class, all three said Jill.

Karen

Karen was a Caucasian American girl with long brown hair and brown eyes. She lived with her mother, father, and two older siblings. In an interview, Sara said that Karen was a typical 5-year-old in her reading and writing abilities. In kindergarten, she worked hard on learning to write her ABC's. Karen was interested in writing, painting, and housekeeping.

Karen often came to school with Jill and Jill's father. At the beginning of kindergarten, she played with Jill every day. However, the other children did not get along well with Karen.
They often said she was bossy and complained that she pushed them or told them what to do. When confronted with accusations, Karen responded by saying that she did not care or that she could do whatever she wanted. Jill and Karen's relationship deteriorated over the course of the school year as Jill became very good friends with Eve. Pam shared her insights on Karen and Jill's relationship in an interview. Pam commented, "Karen's social skills are not as developed as Jill's. Jill uses words like please and thank you when she wants something. Karen would be, 'Give it to me.' Just yesterday, she made Eve cry. She was telling Lynn something, and she didn't want Eve to know. I had to talk to her yesterday about the way she says things. She also started explaining what happened with Eve, and she started yelling. I told her we could talk about things, we didn't have to yell" (Interview 030698). In a separate interview Sara said, "I know at the beginning of the year, Karen would follow Jill around and Jill really didn't want her following her around. She'd come to me and ask what to do. I tell her to talk to Karen in a really respectful way. I'm amazed at when Karen can be flexible" (Interview 121097). However, Karen was cooperative with teachers and could be a good leader with younger children (Interview 042998).

Kathy

Kathy was a Caucasian American girl with brown shoulder length hair and brown eyes. Kathy lived with her mother, father, and an older brother. Prior to entering kindergarten, Kathy participated in the laboratory school's preschool program with her best friends Amy and Ted. In kindergarten, she also developed a relationship with Evan. Kathy received services outside of the classroom for a speech impediment. When adults could not understand Kathy, Amy often translated for her. When asked if any children were having problems with language skills, Tara said, "Kathy, because she has a speech specialist. I don't catch much, I always need to ask her, or I use the whole context to guess what she said. Or ask her, 'can you show me?' Or if there are some children around, maybe other children they will tell me, so I still not quite" (Interview 040198). Kathy could be very funny and often became silly
when interacting with Ted or Evan. Kathy enjoyed many activities including housekeeping, construction with scrounge, and painting. In an interview Sara said, "Kathy is mechanically intelligent...people always want to join in on her creative projects and she's very generous about that" (Interview 042998).

Keith

Keith was a tall boy with black hair and brown eyes. He lived with his mother, father, and two older sisters who had traveled to the United States from Iran. Like many of the other children, Keith was articulate and intelligent. He enjoyed playing Legos and was just learning how to play the violin. He often played with Lynn and Pete. The year before kindergarten, he attended the laboratory school's preschool program. In an interview Sara said, "Keith is the perfect student for every teacher because he works so hard and is so bright. Keith is so easy going and kind to everybody" (Interview 042998).

Kevin

Kevin was also a boy with black hair and brown eyes, but he had a larger build than the other boys in the class. Although his mother and father were from Turkey, he and a younger brother were born in the United States. In an interview Sara said, "Kevin is so bright. His challenge is to use his great abstract thinking in terms of math. He can do 60 minus 5 abstractly. He's really good. He's a good beginning reader" (Interview 042998). During free play, Kevin was interested in superheroes particularly Batman and Power Rangers. He also enjoyed constructing robots and playing with cars, blocks, and dinosaurs. On the playground, he participated in war play and sports such as soccer, basketball, and football. His best friends were Will and Tim. He was the leader of this threesome. Although Kevin was liked by most of his classmates, he did not get along with Amy because she did not let him play in some games. He was very talkative and had a good sense of humor that seemed to get him in trouble when his silliness got out of hand. He was not afraid to tell people how he felt or
what he needed. In an interview Sara said, "He's a good talker, very verbal" (Interview 042998).

Lynn

Lynn was a Caucasian American girl with blonde bobbed hair and blue eyes. She lived with her mother, father, and two older siblings. Like many of the other children, Lynn was bright. In an interview Sara said, "Lynn picks up systems so quickly. Very good learner of traditional organized systems. Socially, her strength is observant and thoughtful and her challenge is to verbalize it" (Interview 042998). Lynn was very quiet, but liked by most of her classmates. Lynn played with Eve, Jill, Karen, and Keith. In an interview Pam said, "Lynn is very smart. Lynn goes along with anything. It's almost as if Lynn can get overlooked in the classroom. She's so quiet. She's always sitting so quietly in front of the teacher" (Interview 030698). In a separate interview, Tara shared her perspective on Lynn. She said, "Lynn is kind of quiet, but not, but depend on what kind of thing you're talking, you know the conversation, the topic. In my mind she is a very quiet child. You can talk to her, you can make compromises with her, and usually she doesn't make any troubles. She's not shy in group time. She's quiet, not because of shy, because during group time she will still, you know, raise her hand and express her opinions and ideas" (Interview 040198).

Mary

Mary was a Caucasian American girl with long blonde curly hair and blue eyes. She was a talented ice skater and could read and write well for her age. In an interview Sara said, "Mary is so intellectually a great beginning reader" (Interview 042998). She was also very talkative and enjoyed an audience. She had a great memory and could retell a whole story without looking at the book. In an interview Pam said, "Mary is very smart. Mary likes to tell stories, and she talks so much, that her stories last forever. Mary is very detailed" (Interview 030698). At the beginning of the year, Mary cried if she did not get her way, but this behavior faded quickly. Although Mary played with many of the children, she did not seem to
have any close friends in the class. Sara commented on Mary's lack of friends in an interview, she said, "Socially, I think that she should work on getting a friend. She's good at getting friends through what she does" (Interview 042998). Pam agreed, "Mary's by herself a lot" (Interview 030698). She can spend long spans of time by herself on construction projects. In a separate interview Tara said, "Mary, she's had a lot of ideas and contribution, especially the art" (Interview 040198). Sara agreed, "She is incredibly creative. Her work is so well thought out. It's so broad and extensive" (Interview 042998).

**Nina**

Nina was the only child of parents from India. She had bobbed black hair and brown eyes. She was very intelligent, articulate, and a talented gymnast. At the end of the year, Sara said, "Nina is gifted mathematically. Socially she loves to explain things and to be a very kind leader" (Interview 042998). However, the relationship between Nina and her best friend Carla was filled with conflict and they often needed the help of teachers to make successful compromises. In addition, Nina had the reputation of being a tattle-tell. The children did not like Nina because she told teachers about their inappropriate behavior. In an interview Sara said, "Nina is an only child. I do not think [of her] coming to me as tattling, I think [of her] coming to me as Nina saying that she doesn't know how to handle this" (Interview 121097). Nina liked to draw, paint, write and participate in many teacher directed activities. In an interview Pam said, "Nina likes to talk to teachers. I like Nina, I think she's real pleasant to teach" (Interview 030698).

**Pete**

Pete was a Caucasian American boy with blonde hair and blue eyes. He lived with his mother, father, and an older sister. Prior to entering kindergarten, Pete participated in the laboratory school's preschool. All the teachers agreed that Pete was extremely bright and mathematically gifted. Pete often brought activities from home into the classroom. He
enjoyed many of his sister's activities such as reading books, knitting, wearing jewelry, and playing cats cradle. In an interview, Sara said,

He brings in things that he has learned from his older sister. He'll bring in a collection of Goosebumps books. He brought in a metal detector. Everything he brings in has to do with learning, so I don't think of them as toys. It takes lots of help from me so that he can share these things with other people. Now he wears these little gold rings and he has this necklace with little gold hearts. He picks this up from his sister. Typically he's very scientific, but sometimes he does these very feminine things. His sister is seven years old, so I take it that he's very competitive with his sister and wants to do what his sister does. (Interview 121097)

Pete's interest in some activities appeared to be obsessive. Sara said, "He can be obsessed by things in a more than typical way. So if he's doing puzzles, he has to be doing puzzles all day. It takes a lot of energy to say no" (Interview 042998). Pete was also very interested in Legos. He brought Lego magazines to school and talked about the ones he was going to get or the ones he had at home. In an interview Pam said, "Another thing, he's real obsessed with is Legos, so he's kind of possessive about those" (Interview 030698).

In the classroom, Pete spent most of his time by himself in activities that he brought from home or with table toys. His participation in dramatic play activities or other social activities was limited. In an interview Pam said, "As far as playmates in the room, he really doesn't have any. Keith sometimes. He sits at tables a lot where there is something to do. But he always wants a teacher to be watching him" (Interview 030698). The activities and objects Pete brought to school from home helped Pete with his social skills. At the end of the school year, Sara said, "Socially his strength is that he brings in interesting things for people to see" (Interview 042998).

His family was very concerned about his behavior. His father often discussed Pete's behavior with Sara and watched Pete from the observation booth. In an interview Pam said,

I was with Pete last year....I was scared to work with him...He's so difficult to get under control. You have to hold onto him so he isn't hurting anyone else...as the year went on, his behavior improved. He can be really deceiving sometimes, and I won't let
him manipulate me. At quiet times, sometimes he wants to throw things. If he gets mad at Sara, it's 'Sara's stupid.' One day, she was in the booth talking to some parents, and he was so mad he started throwing things at the screen. He'll also say the same things about his dad if he puts something in his lunch that he doesn't like. (Interview 030698)

In a separate interview Sara said, "He doesn't have an internal sense of self-control" (Interview 121097).

Pam also said, "The things you can do with Evan, you can't do with Pete. When Evan's being disruptive, it's real easy to remove him from the group. He cooperates real well. But with Pete he's not so cooperative. I know this year when I take him out in the hallway, and even last year, it makes it worse. When self-selection ends to go to large group, he has a difficult time with that transition. He won't pick anything up" (Interview 030698). In a separate interview Sara said, "If there's not somebody in the classroom who Pete knows can firmly and calmly set the boundary, his little body starts going. But, if he has one teacher and he knows what the boundaries are, he's pretty good" (Interview 042998).

Tara discussed the strategies the teachers used to manage Pete's behavior. Tara said, "We used like we'd count one... two... three... and he would follow, but some days it didn't work. So we're also talking about him, you know, how to help him. He love Lego magazines, so we were counting, you know, like in the morning we say it's closed and then if he have a good behavior, you know, in the afternoon that can be open for him during quiet time. Also like going outside, we say it is a privilege to go out or sometimes we can say how long he cannot go out as a consequence. We ask him to look at those people and think and get calm" (Interview 040198). Counting really calmly, for some reason, helped Pete to gain control of his behaviors. In an interview Sara said, "Pete is challenging but he really responds to real reasons for things" (Interview 042998).

Pete had an Individualized Educational Plan (IEP). The goals written on the IEP included being able to handle transitions on his own without getting out of control and having
the boundaries and rules of the classroom come from inside him. An informal goal Sara had was for Pete to be more social.

Sam

Sam was an Asian boy with black hair and black eyes. He lived with his mother, father, and an older brother. His father was employed at the university and his mother was a student. He was articulate and intelligent and was just beginning to take piano lessons. In an interview Sara said, "Sam is mathematically gifted, and creatively and mechanically gifted. Socially his strength is probably ideas in a small group" (Interview 042998). Most of the time, Sam played with Ted and Wade, but sometimes he would play with Kevin, Will, and Tim. His interests were spaceships, origami, and soccer.

Scott

Scott was a Caucasian boy with blonde hair and blue eyes. His family traveled to the United States from the Netherlands. He lived with his mother, father, and younger brother. Since Scott was three years old, he participated in the laboratory preschool program. He was very intelligent and articulate. Tara commented, "I think he's a pretty smart kid" (Interview 040198). He can explain complicated ideas and procedures with ease. In an interview Sara said, "Scott can reason at such an unbelievably high, abstract level. He can have great discussions about values" (Interview 0429998).

Scott was very well liked by all his classmates. He played with many of the children and often traveled from one activity in the room to the other. In an interview, Pam said, "Scott gets along with everybody...he's well liked by everybody" (Interview 030698). In a separate interview Tara also commented, "Scott had very good strategy to work with people to make everybody feel ...comfortable, happy. ...Scott is very good at sharing and helping people. He takes initiative to do those without people or any other adult asking to do that" (Interview 040198). The teachers also enjoyed having Scott in the classroom. Pam said,
"Scott is very easy to get attached to. I love working with him. The other day, he actually misbehaved and I didn't know what to do. I was so shocked" (Interview 030698).

Scott was very interested in new people that came into the room and would often approach them to ask what they were doing in the classroom. Tara commented, "He's not quiet,...but I think he do a lot of observation of people" (Interview 040198). However, his observant behavior may be due to a sense of anxiety that he feels. In a separate interview Pam said, "He's just real nervous with the unfamiliar. Last year he was this little paranoid boy. He would make sure that we stuck to our schedule—‘It's 9:30, time to clean up’" (Interview 030698).

A consistent routine continued to be important to Scott in kindergarten. As Tara explained, “He follows rules and routines and sometimes he reminds the teacher. ‘You’re suppose to do this’ or ask ‘How long do we have before clean up time?’” (Interview 040198). However, Sara noticed that as the year progressed, Scott became less nervous and more relaxed. Sara said, "He's grown socially because he's relaxed. He's more flexible. He's less likely to be traumatized if he makes a mistake" (Interview 042998).

Ted

Ted was a Caucasian American boy with brown hair and brown eyes. He lived with his mother who was a professor at the university. Before entering the kindergarten, Ted participated in the laboratory preschool program. He was interested in superheroes, weapon's play, and spaceships. In an interview Tara said, "Ted watches a lot of video tape or TV." Most of the time he played with Amy and Kathy or Sam and Wade. In an interview Sara said, "Working on a team with one or two people would be socially [his strength]" (Interview 042998). He was very funny and had a good sense of humor. Pam said that when Ted played with older children he picked up on their language and tried to repeat them. She said, “I have a hard time dealing with it when he starts to sing songs with those words in it, because the other kids will hear him, and they'll start singing it too. Sometimes I just put him at another
table and tell him that in kindergarten those words are closed. I think that he just picks up words from the older children, and he doesn't know how to use them" (Interview 030698).

Tara explained a different strategy she used with Ted. She said, "If he was not listening to other people, I ask him to sit down first. I take care of the other children first, and I talk to him individually, without other children around me. He just be silly sometimes" (Interview 042998). At the end of the year Sara said, "Ted needs real reasons for things and to be really listened to and talked to. And asked really respectfully or he is rebellious. I always think what it would be like to have David Letterman in class, that would be Ted. So Ted needs to be talked to and praised" (Interview 0402998).

Tim

Tim was the only child of parents from China. He had short spiky black hair and black eyes. He was shorter than the other children in the class. In an interview Sara said, "Tim is extremely bright mathematically" (Interview 042998). He was interested in superheroes, robots, cars, blocks, Legos, and dinosaurs. Every day he played with Kevin and Will, but he was not well liked by the other children in the class. He had a tendency to be aggressive and easily came into conflict with the other children, particularly Kevin and Will. However, he listened well to the teachers when he was disciplined. Sara said that when Tim was making a compromise, he could say what he thought and throughout the year he became more flexible and less stubborn (Interview 042998).

Wade

Wade was an Asian boy with black hair and black eyes. Although he was quieter than the other boys in the class, he was well liked by many of the children. He often played with Sam, Ted, Tim, and Will. He and Carla also considered themselves to be friends. He was interested in airplanes, cars, blocks, and dinosaurs. In an interview Sara said, "Wade is the most focused person. He thinks about things so hard. He's able to do things precisely"
For example, Wade could look at a picture and copy it onto a blank white page using only a pencil.

Will

Will was also an Asian boy with black hair and black eyes. He was smaller than the other children in his class, except for Tim. His family recently moved to the United States from China and he was still learning to speak English when he entered the kindergarten. Every day he played with Tim and Kevin, but he was not well liked by his other peers. For example, in an interview Eve said that Will talked funny. However, Sara said, "Will absolutely amazes me. He has only been speaking English for a year. Will is incredibly smart and picks things up so fast. I think that the reason he doesn't attend at large group is because he doesn't understand everything that I'm saying" (Interview 121097). His interests included superheroes, particularly Power Rangers, robots, airplanes, cars, blocks, Legos, and dinosaurs. Sara said, "He looks up to Kevin. I let them bring their coloring books from home. Kevin brought in a Power Rangers coloring book. All of a sudden Will has three Power Ranger coloring books. Will is so interesting. He wants to cut a page up into a puzzle. It's like concrete Kevin thing, peer culture. He looks so happy with the little Power Ranger things. He's not being aggressive" (Interview 121097). Sara said, "Will is this keen observer. He can take some idea we do at school and figure out 20 variations of it. He's very creative" (Interview 042998).

The Role of the Researcher

In the naturalistic paradigm, the researcher is not a neutral observer of the participants' behaviors, but is rather an active participant. Therefore, my own background and how I feel during the data collection process affects what I observe, document, and how I interpret the data. Information that may affect my role as participant observer and researcher in this study is presented below.
I am a Ph.D. student studying Child Development at the university where the kindergarten classroom was housed. During the time I participated in the kindergarten classroom, I was teaching a child development class. Students from my class were participants, for an hour a week, in the kindergarten classroom. However, only two of the college students from my class participated in the kindergarten at the same time that I did. Prior to their entering the setting, I explained my role as researcher in the classroom and asked that they refer any questions they had to the head teacher rather than myself when interacting in the kindergarten classroom.

My previous experience working in early childhood classrooms included, working as an assistant teacher and substitute teacher for an agency that operated five child care centers in the community and serving as a participant observer in a study of an integrated classroom located in the same building as the kindergarten classroom.

In 1996, the year before I became a participant in the kindergarten, I interviewed the head teacher. In addition, I had previous contact with other participants in the classroom. I observed a mixed-age preschool classroom the summer before entering the kindergarten classroom. Scott and Carla were both in this summer program. I also met Jasmine, when she was three, and the student teacher, Kate at a community child care center. Although Kate remembered me from the child care center, the children did not. I was a stranger to the children on the first day of kindergarten.

One goal I had, based on my previous experience writing an ethnography, was to capture as much as I could in my field notes. Although this goal enhanced my field notes, it limited my active participation in the class. The kindergarten children interacted and communicated with each other more than the 4-year-old children in the integrated classroom of my previous study. It was difficult to keep up with the pace. Although I participated with all of the children, I interacted more with Will, Nina, Kevin, and Ted than the other children.
In addition, Will and Nina frequently initiated conversation with me and asked for my help with projects.

At the beginning of the study, I was fascinated by the head teacher's communications with the children and the method she used to help the children resolve conflict and make compromises in the classroom. At this time, I began to feel that perhaps I was following the head teacher too much and did not want to offend her. I discussed my presence in the classroom with the head teacher. Sara implied that she did not mind my presence in the classroom and that I had become a regular addition to the class. On occasion Sara asked me to take on a supervisory role of one or two children in an activity (e.g., tree climbing) which I did, but overall I tried to avoid these behaviors.

**Analysis of Pretend and Real Aggression**

The purpose of this study was to describe the real and pretend aggression exhibited by children in a full-day kindergarten. Aggression is defined as any behaviors used by individuals that are intended to hurt or harm another person (Crick & Grotpeter, 1995). According to Crick and Grotpeter, there are two types of aggression. Overt aggression is the "harming of others through physical aggression, verbal threats, or instrumental intimidation" (Crick & Grotpeter, p. 710). Relational aggression is the "harming of others through purposeful manipulation and damage of their peer relationships" (Crick & Grotpeter, p 711). It is the violent acts in children's play that are a concern of parents and teachers; therefore, I chose to examine only overt aggression. Real aggression was identified in an episode when a child used aggressive physical behaviors (e.g., pushing, hitting, biting, kicking) that were directed at a peer or toy or aggressive verbal behaviors (e.g., threatening a peer, name-calling) that were directed at a peer (Watson & Peng, 1992).

In contrast, pretend aggression was identified in an episode if a child exhibited overt aggression in the context of make-believe play, including children or doll characters acting out roles (e.g., "I'll be Batman, you be Robin"), children pretending to transform objects into
other objects (e.g., pretending a Lego was a gun), or children creating objects and imaginary people (e.g., "Let's pretend Joker's cat took the book") (Goff, 1995; Watson & Peng, 1992). An episode of pretend aggression was included in the final analysis if it met the criteria for war play. War play involves children acting out roles of violence, aggression, or war (Nilsson, 1989). All war play episodes included in the analysis involved dramatic play as defined by (1) a child using imitative acts and/or words in a make-believe role, (2) a child using words and movements in the context of make-believe to represent real objects, and (3) a child using words in the context of make-believe to represent acts and situations (Smilansky, 1968). Some episodes of dramatic war play also included the imitation of television figures and/or the creation of warrior weapons using manipulatives or construction materials (Dodd et al., 1992).

The following questions were used to gain a fuller understanding of the difference between children's real and pretend aggression and to investigate strategies teachers used to intervene in real and pretend aggression.

**Guiding Questions**

1. How are children exhibiting both real aggression and pretend aggression?
2. How do the children react to real aggression and pretend aggression?
3. What is the frequency of real aggression and pretend aggression?
4. What are the characteristics of children who frequently participate in real aggression and pretend aggression?
5. How did the teacher intervene in real aggression and pretend aggression?

I did not assign coding categories prior to my observations. The categories evolved from the culture of the classroom. To analyze the data, I used a coding technique (Figure 2) to locate themes and coding categories based on my observations and interviews (Bogdan & Biklen, 1992). Categories emerged from the data as I reviewed the codes to determine those which were related to children's pretend aggression and children's real aggression. These
The children at the help-yourself snack table were having a conversation about what the juice was made of. A girl asked, "What's it made of?" Another girl said, "Bat juice." It's made of bat's protective blood. It protects you too, right?" A girl affirmed, "It's not raspberries." The first girl said, "Yes it is. The teacher said it was." The girl took the snack sign off the table and walked over to the teacher. The girl asked the teacher what the sign said. The teacher said, "Raspberries." The girl walked back to the snack table, "Ha, ha! The teacher said it was raspberries."

Figure 2. Coding example from an observation of a kindergarten

codes were listed on the left side of each observation or interview and key parts of the narratives were highlighted. Throughout the analysis process, I periodically tallied the topic categories to determine which were the most saturated. During this process, I combined some categories under more general themes.

The data set included field notes, 45 90-minute audio cassettes, and 52 video cassettes (2 cassettes were used per day, one for each camera). Running records of pretend and real aggression were recorded during the process of viewing self-selection and outside play on the video cassettes. The quality of sound on the audio cassettes and video cassettes varied with the amount of activity that was in the vicinity at the time of the recording; therefore, only conversations that could be clearly heard and followed were transcribed. The audio cassette
transcripts were incorporated into previously typed field notes. I read these field notes to locate episodes of real and pretend aggression. I highlighted episodes of pretend aggression using a yellow marker and episodes of real aggression using a blue marker. I reread the highlighted portions in the field notes using the previously described coding technique in the margins.

The sequence of pretend and real aggression identified in the field notes and the running records of the video cassettes were recorded on observation worksheets (Figure 3). Through these worksheets, data were narrowed down, organized, and counted. Frequency counts were reported to support the findings of this qualitative study. This helped to identify, for example, which behaviors were exhibited the most often, the least, and by whom. Looking at the descriptive statistics and comparing them to what participants verbally reported helped to explain the participants' perceptions and added strength to my interpretations (Bogdan & Biklen, 1992).

I also used domain analysis to locate categories of meaning by examining the field notes and the running records of the video cassettes to identify cultural domains (Spradley, 1980). "A cultural domain is a category of cultural meaning that includes other smaller categories" (Spradley, p. 88). The category terms may either be words used by the people within the culture or determined by the researcher. The domain analysis was guided by previous research. A domain analysis worksheet (Figure 4) was completed using semantic relationships that corresponded to the problem questions. Domain terms were identified in the collected data that correspond to the chosen semantic relationship. A list of all identified domains was accomplished by repeatedly searching through field notes and transcripts using a number of semantic relationships (Spradley).

Definitions of the categories that emerged from the data during the analysis process were listed in several tables located in Appendix C. The findings of the study were supported by detailed descriptions of the culture, interviews with the teachers and parents, and
Type of Aggression: Real  
Activity: Blocks  
Date: 4-23-97

<table>
<thead>
<tr>
<th>Aggressor</th>
<th>Target of Aggression</th>
<th>Initial Aggression</th>
<th>New Aggression</th>
<th>Target Reply</th>
<th>Aggressor Response to Target</th>
<th>Target Response to Aggressor</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>Kelly</td>
<td>John grabbed</td>
<td>Kelly hit John</td>
<td>John cries</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kelly's car</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Child Intervention**  
The teacher places Kelly in time out.  
**Adult Intervention**  
**Response to Adult Intervention**  
**Outcome**  
**Comments**  
Children Separated

Figure 3. Observational worksheet to record the sequence of real aggression or pretend aggression
Hitting

Kicking is a kind of aggressive act.

Pushing

Figure 4. Domain analysis worksheet

descriptive statistics. The results were reported with thick descriptions of the children's pretend and real aggression through examples from the data (Hammersley & Atkinson, 1983).

The results and interpretations of pretend and real aggression are divided into three sections. First, a description of pretend aggression is presented, followed by a description of real aggression. Each section examines the classroom environment and details the behaviors of the aggressors, targets, and teachers. Finally, the contrast between pretend and real aggression is presented detailing their similarities and differences.

Pretend aggression

The description of pretend aggression begins with the areas in the room that it occurred and the materials that were used. Then, the behaviors of the children, including the aggressor and the target, and the teachers are presented. Finally, the outcome of pretend aggression as well as how the aggression stopped is revealed.

Area in the room where pretend aggression occurred. Inside the classroom, pretend aggression frequently occurred on a large rectangle blue carpet (n=42) used for floor play or gross motor activities and at four tables (n=31) located on the main floor of the classroom (see Table 3). Pretend aggression often accompanied manipulatives including blocks (n=14), cars (n=14), dinosaurs (n=8), and plastic geometric connecting pieces (n=8) (see Table 4). The boys played with the blocks, cars, and dinosaurs on the blue carpet, but the tables were sites for the plastic geometric connecting pieces. Legos (n=6) were also a popular activity among boys in the classroom, who often gathered around a bin filled with Legos on the blue carpet and built military equipment, vehicles, and weapons to use in war play scenarios.
Table 3. The frequencies of the areas in the classroom where pretend aggression occurred

<table>
<thead>
<tr>
<th>Area in classroom</th>
<th>Pretend aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balcony</td>
<td>8</td>
</tr>
<tr>
<td>Basin</td>
<td>1</td>
</tr>
<tr>
<td>Blue carpet</td>
<td>42</td>
</tr>
<tr>
<td>Cubby</td>
<td>1</td>
</tr>
<tr>
<td>Outside</td>
<td>25</td>
</tr>
<tr>
<td>Tables</td>
<td>31</td>
</tr>
</tbody>
</table>

Table 4. The materials most frequently involved in pretend aggression

<table>
<thead>
<tr>
<th>Materials</th>
<th>Pretend aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blocks</td>
<td>14</td>
</tr>
<tr>
<td>Cars</td>
<td>14</td>
</tr>
<tr>
<td>Dinosaur</td>
<td>8</td>
</tr>
<tr>
<td>Geometric connecting pieces</td>
<td>8</td>
</tr>
<tr>
<td>Lego</td>
<td>6</td>
</tr>
<tr>
<td>Lincoln logs</td>
<td>5</td>
</tr>
<tr>
<td>Playdough</td>
<td>1</td>
</tr>
<tr>
<td>Robots made from scrounge</td>
<td>3</td>
</tr>
<tr>
<td>Small Blocks</td>
<td>3</td>
</tr>
</tbody>
</table>

Pretend aggression also occurred on the playground (n=25), but props were rarely used in these dramatic play scenarios. In contrast, rough-and-tumble play and superhero themes were common on the playground. The children were also more likely to use the names of superhero characters on the playground than the generic terms of good guys and bad guys that they often used to label characters in the classroom. However, not all the games on the playground were scripts from superheroes. For example, jail, a chasing game the children
invented, also included pretend aggression. In the game of jail, the children acted out the roles of prisoners and guards. The object of the game was for the guards to catch the prisoners and put them in a jungle gym designated as the jail. After the children were captured and told to crawl into the jungle gym, they would escape and the guards would once again chase after them, catch them, and put them back in the jungle gym.

Key players in pretend aggression. After analyzing the field notes and the running records from the video cassettes of the classroom, I identified 79 episodes of pretend aggression. Boys participated in a 100% of the episodes, but girls participated in only 13% of the episodes. The children who frequently participated in episodes of pretend aggression were Kevin (n=43), Tim (n=32), Ted (n=31), Sam (n=30), and Will (n=26) (see Table 5).

Every day Kevin, Tim, and Will played together. In an interview, Pam, the graduate assistant, commented that they “try to play together, mainly because they have the same interests” (Interview 030698). Kevin, Tim, and Will spent most of their time in activities that included Legos, blocks, cars, robots, and superheroes, particularly Power Rangers. Power

<table>
<thead>
<tr>
<th>Boys</th>
<th>n</th>
<th>Girls</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evan</td>
<td>4</td>
<td>Amy</td>
<td>3</td>
</tr>
<tr>
<td>Keith</td>
<td>7</td>
<td>Carla</td>
<td>7</td>
</tr>
<tr>
<td>Kevin</td>
<td>43</td>
<td>Eve</td>
<td>3</td>
</tr>
<tr>
<td>Pete</td>
<td>3</td>
<td>Jasmine</td>
<td>2</td>
</tr>
<tr>
<td>Sam</td>
<td>30</td>
<td>Jill</td>
<td>2</td>
</tr>
<tr>
<td>Scott</td>
<td>11</td>
<td>Karen</td>
<td>0</td>
</tr>
<tr>
<td>Ted</td>
<td>31</td>
<td>Kathy</td>
<td>1</td>
</tr>
<tr>
<td>Tim</td>
<td>32</td>
<td>Lynn</td>
<td>2</td>
</tr>
<tr>
<td>Wade</td>
<td>13</td>
<td>Mary</td>
<td>1</td>
</tr>
<tr>
<td>Will</td>
<td>26</td>
<td>Nina</td>
<td>5</td>
</tr>
</tbody>
</table>
Rangers was a theme in their dramatic play, their drawings, their writings, and in their daily conversations (see Appendix D). On several different days, Will and Kevin brought Mighty Morphin Power Ranger coloring books to school (Field Note 121097). They also made their own coloring books. In one book, Will drew Batman, Spiderman, robots, and Superfriends. He said it was a robot book (Field Note 101797). In an interview, Sara, the head teacher, commented on her view of Will’s coloring activity:

He looks up to Kevin. I let them bring their coloring books from home. Kevin brought in a Power Rangers coloring book. All of a sudden Will has three Power Ranger coloring books. Will is so interesting. He wants to cut a page up into a puzzle. It’s like a concrete Kevin thing, peer culture. He looks so happy with the little Power Ranger things. He’s not being aggressive. (Interview 121097)

The boys also made robots out of scrounge materials such as cardboard boxes, tin foil, and tape. One day Tim and Will were on the balcony making robots with scrounge materials. Will said, "We are making a robot game. Yeah, a Power Ranger Turbo game." Sara said, "A Power Ranger Turbo robot game. Neat guys." Tim said, "I even have a robot like that at home" (Field Note 120597). Another day, Kevin made a weapon by taping an empty paper towel roll to the top of an old Perkins restaurant box. He said, "This is a tanker." Kevin pretended to shoot the tank and then showed his creation to Tim (Field Note 110797).

Another interest Kevin, Will, and Tim shared was watching aggressive superhero cartoons. In individual interviews, I asked the children what television shows or cartoons they watched. Tim said, "Power Rangers, Spiderman, Batman, and Beetleborgs and I think I have one more...and Sonic and that's all" (Interview 120597). The television show Big Bad Beetleborgs is a cartoon about three children who become superhero characters. In each episode, the children use their super powers to defeat the evil characters Vexor and the Magnavors (Pazsaz Entertainment Network, 1996).

In an interview Kevin said, "I watch like, um, fighting ones, I watch more Fox 17 and when I, sometimes I watch movies a little for, for parents and kids." Kevin said his favorite
television show was Beetleborgs (Interview 120597). In an interview with Kevin's father, he also mentioned that Kevin enjoyed watching cartoons. His father said, "Now more fighting cartoons" (Interview 050598). Although Will did not answer the interview questions regarding television viewing, he did talk to Tim, one day during self-selection, about buying a Power Rangers movie and inviting Tim over to watch it at his house.

Many of the children in the class participated in Will, Kevin, and Tim’s Power Rangers games. When Eve was asked why she liked to play with Kevin, she said, "Because I play with Kevin, um I play Rangers with him, so that's why I like him" (Interview 120597). However, a few mentioned that the Power Rangers activity was one reason they did not like to play with Will and Tim. When asked why Wade did not like to play with Will, he said, "Because he likes Power Rangers and I don't like Power Rangers." In a separate interview, Scott said he did not like to play with Will, "... because he like tells me to fire things. To fire every girl down." I asked, "Like fire, what do you mean by that?" Scott said, "Like firing Lynn down." I asked, "Like guns?" Scott said, "Yeah" (Interview 120597). Similarly, when Scott was asked why he did not like to play with Tim, he said, "Because he always wants to play Power Rangers" (Interview 050698).

Similar to Kevin, Will, and Tim, Ted was also interested in superheroes. In an interview, he said that one of his favorite toys was a Batmobile. Ted said, "It's a Batmobile, it sort of looks like a blue Batmobile and you have these things that you press down and jaws open up" (Interview 120597). Even though Ted indicated an interest in superheroes, he was not obsessed with them. In contrast to Kevin, Will, and Tim, Ted incorporated more military themes into his play. Ted and Sam were also interested in creating, flying, and battling with fighter jets. Ted and Sam were more likely to play with each other than with Kevin, Will, and Tim. In an interview, Pam, the graduate assistant, said, "Occasionally, Sam plays with them [Kevin, Tim, and Will], but him and Ted are usually together. When I see Sam and Ted playing together, it's usually a level higher than the other three, as far as their level of
imagination" (Interview 030698). In contrast to Kevin, Will, and Tim, neither Ted nor Sam mentioned superhero cartoons when asked about their favorite television shows. Ted said, "Fox cable, on Saturday mornings and Beakman's World" (Interview 120597). Sam's favorites were Goosebumps, Wishbone, and Sonic (Interview 120597).

Scott, Pete, Evan, and Keith were not as frequently involved in acting out episodes of pretend aggression as the other boys in the class. Scott, Pete, and Keith were more interested in Legos than in superheroes or military games. Similar to Ted and Sam, these boys did not mention a superhero cartoon when they were asked about the television shows they watched. Scott said, "Sometimes I can watch television at night. I have a favorite TV show, one of my favorite, I have a video that is my favorite, ah, Aladdin" (Interview 120597). He also discussed Annabelle the Witch. Keith mentioned television, but not superhero programs. He said his favorite program was Sesame Street (Interview 120597). He also talked about Grape Ape and Flipper and Friends one day during self-selection (Field Note 090397).

The attitudes of the boys' parents toward television and aggression may have influenced their interest in aggressive cartoons and superhero play that included pretend aggression. For example, Kevin, who participated in 54% of the episodes containing pretend aggression, had parents who allowed him to watch violent cartoons. In an interview, Kevin's mother said,

I think he's very active, responsible, can be aggressive, yet, I think, he's very sensitive...I used to restrict him on what he watches, but now he comes home and knows all about these things. He didn't use to watch Power Rangers or any books about that, yet he knows how they fight and everything. So, we might as well let him watch it. The first time when I let him free to watch he thought it was great, but now it's not that attractive to him anymore. (Interview 050598)

Even though Kevin's mother did not allow him to watch Power Rangers in the past, he learned about the superhero characters from his friends at school. Perhaps feeling helpless to stop the shows' influence on her son, Kevin's mother decided to let him watch the program.
In contrast to Kevin, Scott participated in only 14% of the episodes containing pretend aggression. His mother held strong negative opinions of aggression and violent television programs. Scott's mother's concerns with aggression were evident at the beginning of the school year. On the first day of class, Scott, Ted, Amy and other children had fun punching a boxing bag the teachers had hung on the playground. However, the next day, Scott's mother expressed her concern that the punching bag may provoke aggression (Field Note 082897). Sara, the head teacher, listened to Scott's mother's concerns and removed the punching bag from the playground. In addition, Scott's mother did not allow him to watch many of the superhero cartoons that some of his peers watched on a daily basis. In an interview she discussed her views on television, commenting that:

> We have extremely limited use of television at home. I think that Scott must have been 3 or 4 years old when he saw his first video film. He's never seen Power Rangers at home or anything of that sort. They (i.e., her children) don't ask to watch television in general. Most days, they wouldn't dream of asking to watch television. I'm proud of that and pleased with that....I just feel there's some awful shows on television. In that respect, in kindergarten there are these clubs like Power Rangers and things like that. Scott was drifting from one to the other and I thought he was accepted in all, but again he didn't know about these things first hand. (Interview 041698)

Because Scott's mother monitored his television viewing, he lacked the knowledge his peers had about the characters in violent cartoons. Scott struggled to understand his peers' fascination with superhero characters, particularly the characters in the cartoon Big Bad Beetleborgs. In this cartoon, three children entered a haunted house where they were turned into the superhero characters, Big Bad Beetleborgs, by a “phasm” named Flabber. In each episode, the children use their super powers to defeat the evil characters Vexor and the Magnavors (Pazsaz Entertainment Network, 1996). Scott's mother's influence was evident when Scott participated in a discussion with Ted, Amy, and Sara on Beetleborgs. A segment from this discussion is presented below:

> Scott said, "Sara, I have an idea." ...Sara said, "Okay Scott." Scott said, "Why do they have to shoot?" Sara said, "Who?" Scott said, "The Beetleborgs. Why?" Amy said,
"To kill the bad guys," Sara said, "Tell Scott that." Amy said, "To kill the bad people. They're not people they're monster things." Scott said, "Why? You don't have to kill them, you could just put them in jail." Sara said, "Tell Ted and Amy that." Scott said, "You don't just kill people. You don't have to kill a person to be the boss." Amy said, "They're really bad people." Scott said, "Why don't you just put them in jail?" Ted said, "I mean they are kind of evil." Amy said, "The Beetleborgs don't do that." Ted said, "Anyway, there's no police where they are." Sara said, "There's no police?" Amy said, "No, but there are lots of people in it." Sara said, "Can I stop you guys a minute? I heard Scott say, you don't have to kill people that are bad, to stop them just put them in jail." Ted said, "They can break out of the bars." Amy said, "Yeah, they have big muscles." Sara said, "Tell Scott that. Say, Scott, they can break out of the bars." Ted said, "They can break out of the bars." Amy said, "Cause they do this and then..." Sara interrupted, "Amy, Amy. I want you to respect Ted and Scott, and don't talk at the same time as Ted, and then I want you to tell Scott." Scott said, "Ted, Why are they bad and why do they want to be the boss." Amy said, "They don't like us, they don't like the Beetleborgs. They want Flabber, he's a good guy he makes powers." Sara said, "Respect Scott, he asked Ted." Ted said, "They are sorta like the movie Space Jam, because there's other characters and they are not hockey players." Scott said, "Why can't the monsters, you know like in the Pocahontas movie they fought, but then the Pocahontas said you don't have to fight to be the boss. Why did you have to fight?" Amy said, "They can break out of jail, that's what we are trying to tell you. See they go like this up to the sky, they go up to graves, and under little craters." Scott said, "Can't you just put more people on the list and some people as the guards?" Amy said, "Well that's what we are kind of going to do, but there are no guards in Beetleborgs." Ted said, "There is this much people all ready." Amy said, "Because they are just like Beetleborgs who like save the people. They make like thunder." Sara said, "You know what? I didn't think I was in kindergarten. I thought I was listening to adults talk about this, because you know what I heard Scott say? You don't have to kill people. If they're bad, just put them in jail and get lots of guards. And you said that they would escape and they are so evil we have to kill them." Amy said, "Yeah, because they go like this and they go up into the sky and they go into other people's graves and they have a cave." Ted said, "They have powers too. Because they would break out and the guards would get him. Like Scott was saying and like Amy was saying, when they do that the guards can't go flying with them, so we just have to kill them, that's why." Scott said, "Why don't you make a plan where there's a lot of Beetleborgs, but no killing other people, like them guys." He pointed to the children in the room. Amy said, "See, they're imaginary people." Scott said, "Okay, maybe that's allowed, but not with people like them, okay?" Amy said, "See, we're not doing that. Only imaginary people that's what we always do." (Field Note 090597)

In this discussion, Scott was trying to understand the Beetleborg cartoon and why Beetleborgs need to kill people. He objected to the pretend aggression toward his peers.
Instead, he suggested the children become guards rather than victims of the Beetleborgs. This discussion revealed Scott’s attitude toward aggression and how it closely resembled the values taught to him by his mother at home.

Although many children participated in superhero play in the classroom, not everyone was welcome to participate in the pretend aggression. Some children were excluded from participation because of their sex, social skills, and/or the number of characters available within a particular dramatic play scenario.

In general, the kindergarten children in this study viewed war play as a boys’ activity. In the following excerpt, Carla tried to enter into pretend aggression with Kevin and Tim. The three children were outside on the playground. Kevin was wearing a paper headband and bracelet he made during self-selection. Although Carla was included in their play, she was excluded from participating in the pretend aggression based on her sex.

Kevin said, "Let's play Power Rangers Turbo." Carla said, "What can I be?" Kevin said, "It's kinda like a boys' game." Tim said, "No, girls can play." Kevin said, "You want to be the yellow one?" Carla said, "Yeah, I like yellow, Kevin. I always play with my brother." Will, Kevin, and Tim were pretending to kick, push, and shove each other. Carla said, "Someone hit me in the face." No one pretended to hit Carla. Carla said, "Okay then, I'll just watch you." She sat down on the ground. Tim and Kevin were pretending to punch each other. Carla said, "Kevin, can you help me fight?" Kevin and Tim ignored Carla and continued to punch each other. Will ran by and asked, "Can I play?" Tim said, "Yes, you need to be the bad guy." (Field Note 102997)

Although it did not occur frequently, girls in the classroom did participate in war play episodes. In this example, Carla asked to be included as a full member of the superhero scenario. Her first request was denied with the explanation that it was a boys' game. Even when she was accepted into the play, she was excluded from participating in the pretend aggression. The boys ignored her request to be hit in the face.

While the girls in this study, rarely participated in pretend aggression, they did initiate games with themes of monsters, evil trees, hot lava, and dragons entities that represented
danger and the need to fear them. One day Carla and Nina explained the game "Evil Trees" to a student participant. Carla and Nina were on the playground walking on a balance beam and the student participant was standing in the grass.

Carla said to the student participant, "You're in the water." The student participant stepped off the grass and onto the wooden balance beam. The student participant asked, "Okay, am I safe now?" Carla said, "Yeah, but watch out for the evil trees. If you fall, you will be a monster. There's no way out." The student participant asked, "How will we go to lunch?" Carla said, "When you need to go, it's time out." Nina said, "The trees are bad guys and the rocks are the hot lava and she's the kitty." Carla said to the student participant, "You can't just sit there. The evil trees!" Carla pointed to the tree branches close to the student participant's head. Nina said, "In the winter the trees are higher and they won't touch you." Jasmine said, "I have four more lives." The student participant said, "I need a time out." Nina said, "No, you are the monster. It's safer in the grass." Carla said, "The grass is deeper." Nina said, "If you're in the grass, your out of the game." (Field Note 091997)

In these games, girls were usually the victims of supernatural powers. They rarely initiated aggression toward another player or an imaginary character. The games were structured with elaborate rules rather than the emerging story lines of the boys' superhero play. The object of the game was to stay away from the danger that was all around them. Each time they fell off the balance beam or touched a tree branch, they lost a "life" or a point. They started with a high number of lives so they were never truly out of the game unless they chose to be. Time out was used to indicate the child was leaving the game. Only then was it safe to touch the objects that within the game, were dangerous. Girls and boys both participated in these games, but they were usually initiated and controlled by girls. When boys did play, they were most likely to become monsters, another supernatural force for the girls to fear, rather than the victims.

Children were also excluded from participating in pretend aggression if they lacked social skills. In the next episode, Evan was rejected when he used an unsuccessful strategy to enter into Wade and Will's play. Will called for the teacher when Evan attempted pretend aggression.
Wade and Will were hitting their arms at each other from a distance pretending to fight. Evan ran over to Will, grabbed him, and yelled, "Yah!" Will yelled, "Tara!" Evan walked away. (Field Note 120397)

In this example, Evan was rejected as a play partner, because he used inappropriate social strategies. Walking up to a child and grabbing him, for example, was not an appropriate group entry strategy.

Finally, a child was excluded from participating in pretend aggression when the children's play was based on cartoons with limited numbers of characters. For example, there were only two superhero characters in the cartoon Batman and Robin. When a third child asked to participate in dramatic play scenarios based on the Batman and Robin cartoon, he was either excluded or told that he needed to be a bad guy. In the following example on the playground, Kevin and Ted excluded Tim from their Batman and Robin superhero play.

Tim asked to play Batman and Robin with Kevin and Ted. Kevin said, "He's being Batman and I'm being Robin. No more boys." Kevin and Ted ran away from Tim. (Field Note 092997)

In this episode, Tim tried to enter into the superhero play, but was rejected because the two superhero characters in Batman and Robin were already filled. Kevin informed Tim that no other roles for boys were available in the script and Kevin and Ted ran away.

In summary, children were excluded from episodes of pretend aggression based on their sex, social skills, or the number of characters available within a particular dramatic play scenario. Further analysis of each episode was completed to discover the roles played and the behaviors used by children who were participants in pretend aggression.

**Sequence of pretend aggression.** In each episode, a sequence of pretend aggression began when an aggressor initiated an act of pretend aggression toward a target. In episodes of pretend aggression, the aggressor and the target were children or imaginary characters. In two episodes, the target of a child's pretend aggression was an adult. Although many interactions consisted of an aggressor's initiation followed by the target's reply, other
interactions consisted of several turns by both the aggressor and the target. I refer to the behaviors following the target’s reply to the initial aggression as the aggressor’s response to the target or target’s response to the aggressor.

After the initial aggression and the target’s reply, the aggressor and the target may continue interacting or a new act of aggression may be initiated. Although 44% of the pretend aggression episodes consisted of a single initiation of aggression, new initiations of aggression occurred when a child outside the existing aggressive interaction became the new target of aggression or initiated an act of aggression toward a peer. New initiations occurred in 56% of the pretend aggression episodes. Although as many as 26 new initiations of aggression were recorded in one episode of pretend aggression, it was more common to observe two or three new initiations in an episode of pretend aggression.

Children outside the aggressive interaction also became involved in the aggressive episode if they intervened in an aggressive interaction or if they interrupted by focusing on a topic other than the current behaviors of the aggressor and the target. An adult was often the final player in the aggressive episodes. The adult intervened to stop the aggression and the child responded to the adult’s behaviors. The sequence of an aggressive episode is illustrated in the example of pretend aggression in Figure 5.

In the scenario used to demonstrate the sequence of a pretend aggression episode (Figure 5), Tim and Evan initiated aggression toward Will by pretending to shoot him with their sticks. This type of unprovoked aggression is called bullying. Bullying occurred when an aggressor coerced, intimidated, made fun of, taunted, or assaulted another child without a clear goal for the behavior (Coie et al., 1991). Bullying was the type of aggression the children acted out in 97% of the pretend aggression episodes. Reactive aggression, the aggressive responses accompanied by anger or distress (Coie et al.), occurred in only 1% of the pretend aggression episodes and not a single episode of pretend aggression was classified as instrumental aggression.
<table>
<thead>
<tr>
<th></th>
<th>Initial Aggression</th>
<th>New Aggression</th>
<th>Target Reply</th>
<th>Aggressor’s Response to Target</th>
<th>Target’s Response to Aggressor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tim &amp; Evan: pointed their sticks at Will and shot him.</td>
<td>Will: Shot at Tim and Evan. Then walked away.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Will: Performed a karate kick.</td>
<td>Tim: &quot;This is my gun.&quot;</td>
<td>Will: &quot;Hi yah!&quot; Will did another karate kick.</td>
<td></td>
<td>Tim: Ran.</td>
</tr>
<tr>
<td>3</td>
<td>Sam: Hit Will twice in the face.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Kevin: Pushed Will.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Evan: Put his stick on Will.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5. The sequence of pretend aggression
<table>
<thead>
<tr>
<th></th>
<th>6 Child Intervention</th>
<th>7 Response to Child Intervention</th>
<th>8 Adult Intervention</th>
<th>9 Response to Adult Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sam: &quot;I can go farther than you, right? Because I want to do karate.&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pam: &quot;Tim, put your stick down.&quot;</td>
<td>Tim: &quot;Why?&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Pam: &quot;Because I didn't like the way you are playing with it. Put the stick down. You need to respect me.&quot;</td>
<td>Tim: Put the stick on the ground and ran behind the shed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The aggressor in pretend aggression. The boys who often participated in episodes of pretend aggression also frequently initiated the pretend aggression (see Table 6). Compared to the other children in the class, Kevin (n=25), Ted (n=16), Sam (n=16), Tim (n=11), and Will (n=8) initiated the most pretend aggression. Evan, Pete, Scott, and Wade only initiated one or two acts of pretend aggression. Although girls participated in war play episodes, the girls in this kindergarten class did not initiate a single act of pretend aggression.

When boys initiated pretend aggression they were most likely to act as though they were shooting (n=25), threatening (n=12), hitting (n=7), or blowing up (n=6) an object or a person (see Table 7). An example from the data is presented to illustrate the act of shooting that aggressors frequently used to initiate an episode of pretend aggression. In the following scenario, Kevin and Will built an elaborate block structure that they used when they were playing with dinosaurs on the blue carpet. Kevin directed Will to kill the bad guy and put him in a hiding place. Will's shooting was the initial aggression.

Kevin said, "I want all kinds. Some of the dinosaurs stay with you. Some of the dinosaurs stay with me." Will asked, "Hey, can I go with you?" Kevin said, "Okay, you can go, if you ask me. Watch out for bad guys. Kill the bad guys if you see any." Will said, "Okay." Will said, "I found a bad guy." Kevin said, "Okay, kill him, put him in the bad guy hiding place. This is a good guy." Will made sounds like a gun being shot. Will asked, "Where should I put this?" Kevin said, "Here, they are dead. The good guys are dead. Put him in the bad guy cage. No, right here in the bad guy cage." Kevin was holding a car. Will said, "I found a bad guy's car." Kevin said, "Okay, kill it!" Will said, "Hey, this is my friend. This is my friend." Will was talking about the same car. Kevin said, "Okay, put him in here." Kevin pointed to a separate area on the block structure that was separated from the bad guys' cage. Kevin said, "Put him in the house. Okay get in. Get in the house. This is the door." Will said, "No more bad guys." Kevin was holding one dinosaur and Will was holding another dinosaur. Kevin said, "We need to tell you something. You go kill the bad guys, okay big brother?" Will said, "Okay." Kevin said, "Open up." Will said, "I found some bad guys, I found some bad guys, I found some bad guys!" Will was trying to get Kevin's attention, but Scott and Kevin were busy building on the block structure. Kevin finally responded to Will, "Okay, kill it." Kevin said, "Give me those blocks. Give me those blocks Scott." Will said, "I eat them, I eat them. I ate the dinosaur." (Field Note 101597)
Table 6. The frequencies of children who initiated pretend aggression

<table>
<thead>
<tr>
<th>Name</th>
<th>Initial aggression n</th>
<th>New initiations of aggression n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evan</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Keith</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Kevin</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Pete</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Sam</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Scott</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Ted</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Tim</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>Wade</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Will</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amy</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Carla</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Eve</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Jasmine</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Jill</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Karen</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kathy</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Lynn</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Mary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nina</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
This episode began with Kevin and Will dividing up the dinosaurs. Dividing materials (e.g., cars, dinosaurs) was a common occurrence in the children’s play. In this example, Will used shooting to initiate the bullying or dominant aggression against the target, an imaginary character. When Will complied with Kevin's directions to kill the bad guy, he initiated a new act of pretend aggression by eating the dinosaur.

Similar to the initial acts of pretend aggression, Tim (n=33), Sam (n=30), Kevin (n=22), Ted (n=20), Wade (n=19), and Will (n=14) initiated the majority of new acts of

<table>
<thead>
<tr>
<th>Pretend aggression</th>
<th>Initial aggression n</th>
<th>New initiation of aggression n</th>
<th>Aggressor response to target n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blast</td>
<td>7</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Catch</td>
<td>3</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Charge</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Chase</td>
<td>4</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Cut</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Destroy</td>
<td>1</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Eat</td>
<td>3</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Grab</td>
<td>0</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Hit</td>
<td>7</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Hit object</td>
<td>6</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Hit stick</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Karate</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Kick</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Knock</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Push</td>
<td>4</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Shoot</td>
<td>28</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Stand/sit on body</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Stinging</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Swing arms</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tackle</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Threaten</td>
<td>13</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Throw</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Walk/run into</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Wave stick</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Wrestle</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 7. The frequencies of pretend aggressive behavior
pretend aggression within the aggressive episodes. The most frequent new initiations of pretend aggression were chasing (n=24), shooting (n=20), hitting an object (n=19), hitting a peer (n=17), threatening (n=17), catching (n=14), and grabbing (n=13). The aggressors also introduced new behaviors that were not used in response to the initial aggression including walking or running into a peer (n=5), knocking (n=4), tackling (n=3), pulling (n=2), and stinging (n=2).

Several new initiations of chasing occurred in an episode outside on the playground. In this scenario, the children were playing a game they invented called jail.

Sam was chasing Pete. Scott said, "Sam, can we help you run after Pete?" Scott, Lynn, and Wade chased Pete. Scott ran up to Pete and touched him, but Pete ran to Sara and sat on her lap. Scott and Lynn left. Then, as Scott chased Wade, he wrapped his arms around him and said, "I got him." At the same time, Pete chased Sam and wrapped his arms around him. Scott was holding onto Wade's arms, he pushed Wade and then let go of his arms. Scott ran, but Wade caught him. As Wade held onto Scott's arm, he pushed Scott and then let go of his arm. Pete ran back to Sara. Amy walked up to Pete and hit him. Pete chased Amy then ran back to sit on Sara's lap. Sam grabbed Carla's arms. Wade grabbed her other arm. Sam said, "Let's go inside now." Carla said, "You're supposed to take me to jail." Sam said, "We are taking you to jail." Sam walked with Carla holding onto her hand over to the shed. (Field Note 100397)

In this example, Sam, the aggressor, was acting out the role of a prison guard. He initiated aggression by chasing Pete on the playground. New acts of aggression were initiated when Scott, Lynn, and Wade chased Pete. Finally, Scott initiated the last act of chasing as he ran after Wade trying to catch him.

When an interaction between two children continued after the initial aggression and the target's reply, the aggressors' most frequent responses to the targets were hitting (n=12), shooting (n=12), grabbing (n=9), and threatening (n=9). In the next example, hitting was one of the responses used by the aggressor toward the target. In this episode, Kevin and Tim were playing Power Rangers on the playground.

The pretend aggression began when Tim, in the role of a Power Ranger, hit, pushed, and kicked. As the play progressed, a sequence of hitting continued between Tim and Kevin as they pretended to fight like the Power Ranger characters.

In addition to acting out aggressive actions, aggressors frequently provided the target child with information. This was the most common nonaggressive behavior used by the aggressor. For example, in one episode of pretend aggression, Ted and Wade were playing with dinosaurs. Ted initiated aggression by hitting the dinosaur. As he hit the dinosaur, he also provided information to Wade about his actions and the result of his actions. He said, "Bang! Bang! I pounded these in his eye. Bang, bang, bang! I killed this guy" (Field Note 101797). In pretend aggression, the children used their words to communicate to their playmate the meaning of their actions. Usually, the children aggressed against the characters they considered to be bad guys, but in a few cases the children used their words to indicate that imaginary characters were behaving aggressively toward them. Through their conversations with peers, the children indicated the aggressor's actions.

In the next example, Kevin and Ted were outside on the playground climbing on a wooden structure. Kevin was carrying a packet of papers that were stapled together. The papers contained drawings of robots and superheroes that he drew during self-selection. The aggressor, in the example, was an imaginary character and Kevin was the target of aggression.

Ted asked, "You want to be Batman?" Kevin said, "You be Batman." Kevin climbed up onto a wooden structure. He asked, "Can you be on here with me?" Ted climbed up onto the wooden structure with Kevin. Kevin said, "I'll read my book and peddle." Ted said, "Go really fast." Kevin said, "When someone was reading the book, Joker came and got it. Joker came out." Ted asked, "Joker came out and got it?" Kevin said, "Yeah." Ted said, "...Let's say we're reading a book and Joker's cat came up and grabbed it. They were making fires. Joker disguised himself as an elephant and made a big bomb fire." The wind blew fairly strong. Ted said, "It's a twister, a
twister.” Kevin jumped off the wooden structure. Kevin said, “Blow me down.” Ted jumped off and said, “Blow down. We got a get in our Batmobile, Robin. Let’s get in our ship, this wind is too strong.” Kevin said, "It’s not strong for me." Ted jumped off the wooden structure. Tim walked over and asked to play. Kevin said, “He’s being Batman and I’m being Robin. No more boys.” Kevin and Ted ran away from Tim. (Field Note 092997)

This episode began with labeling characters as the children decided who would be Batman and who would be Robin. As they negotiated the story line, Kevin and Ted used their words to inform each other that Joker and Joker's cat were the aggressors and that they were the targets. Although Kevin set up the war play scenario by informing Ted that Joker grabbed his book, Ted changed and elaborated on the plot informing Kevin that Joker's cat grabbed the book and Joker made a bomb fire.

The target in pretend aggression. Although the children occasionally used their words to portray the imaginary characters as aggressors, it was more common for imaginary characters to be portrayed as targets. In fact, imaginary characters (n=27) were the most frequent targets of children's initial pretend aggression. In contrast to real children, imaginary characters were unable to respond to the acts of the aggressors.

When the target was a real child, the boys were more likely than the girls to be targets of pretend aggression. Boys who were frequent targets of pretend aggression included Ted (n=8), Tim (n=8), Will (n=8), and Kevin (n=6) (see Table 8). In episodes of pretend aggression, the children were most likely to provide the aggressor with information (n=10), ignore the aggressor’s behavior (n=7), or hit their aggressor (n=7) after the initial act of aggression (see Table 9).

Providing a peer with information was the most frequent target response to the initial pretend aggression. In the next episode, Ted and Kevin were playing with blocks and dinosaurs on a large rectangular blue carpet. Ted provided Kevin with information after he hit Ted's dinosaur.
Table 8. The frequencies of children who were targets in pretend aggression

<table>
<thead>
<tr>
<th>Name</th>
<th>Initial target n</th>
<th>New target n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evan</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Keith</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Kevin</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Pete</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Sam</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Scott</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Ted</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Tim</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Wade</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Will</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amy</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Carla</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Eve</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Jasmine</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Jill</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Karen</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kathy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lynn</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Mary</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nina</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Character</td>
<td>27</td>
<td>48</td>
</tr>
<tr>
<td>Adult</td>
<td>NA</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 9. The frequencies of the target's response to pretend aggression

<table>
<thead>
<tr>
<th>Target response</th>
<th>Initial target response</th>
<th>New target response</th>
<th>Target response to aggressor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Nonaggressive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climb</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Comply</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Cry</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Direct</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Explain</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gain attention</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot;I'm telling&quot;</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Ignore</td>
<td>7</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Inform</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Jump</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Laugh</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Mine</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Move away</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Move object</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Observe</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Question</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Reach</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roll/crawl</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Run</td>
<td>5</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Scream</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Verbal protest</td>
<td>2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Aggressive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blow up</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Charge</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Chase</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Destroy</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Gossip</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Grab</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Hit</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Hit object</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hit stick</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Kick</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Knock</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Point stick</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Pull</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 9. (continued)

<table>
<thead>
<tr>
<th>Target response</th>
<th>Initial target response n</th>
<th>New target Response n</th>
<th>Target response to aggressor n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Push</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Shoot</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shoot back</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Swing arms</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Threaten</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Throw</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Walk/run into</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Wrestle</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Kevin picked up his dinosaur and used it to hit Ted's dinosaur on the head. Ted said, "You're hitting him in the head. That's my guy anyway." Kevin said, "Yeah, I'm trying to take him out." Ted said, "No, these are the bad guys." Kevin said, "No, I'm going to take him out." Kevin held the tyrannosaurs-rex dinosaur upside down and shook it. Ted said, "Try to take them out so he can destroy the world all over again. Bad guys are coming out. The bad guys will come out and destroy the world." (Field Note 101397)

Kevin initiated aggression toward Ted's dinosaur by hitting it on the head with his own dinosaur. Ted's response was to inform Kevin that the dinosaur he was hitting on the head belonged to him.

Will (n=24), Tim (n=20), and Sam (n=17) were most likely to be targets of the new initiations of pretend aggression. In most episodes of pretend aggression the targets were not human, but when children were targets of new acts of aggression the children responded by running away from the aggressor (n=20), complying to the demands of the aggressor (n=11), or providing the aggressor with information (n=10). No response by the target was also common when children were not able to respond to the aggressor, because the interaction was interrupted by a third person.
The next example is a segment from an episode of the jail game. In this episode, a
group of boys was chasing a group of girls, capturing them, and putting them into the jungle
gym. The girls tried to out run the aggressors who were chasing them.

Wade chased Jill as she ran. He grabbed onto her arm and walked her over to the
jungle gym and said, “Go in the jail.” Jill crawled inside the jungle gym. Scott said,
“I’ll protect you. Right Sam. No one goes out.” As Jill climbed out of the jungle
gym she said, “I got out Scott.” Jill ran. Scott yelled, “Sam!” Sam chased after Jill,
but she ran to a tree and climbed up onto the branches. Sam, Scott, and Wade walked
back to the jungle gym. (Video 100397)

In this episode, Jill was the target of three boys’ aggressive acts. In response to the
boys’ aggressive chasing behavior, she ran. Although she was unable to out run Wade in the
first interaction, when Sam initiated a new act of aggression, Jill did manage to escape from
the boys by climbing a tree.

When an interaction between two children continued in an episode of pretend
aggression, the targets most frequent responses to the aggressor were providing the aggressor
with information (n=9) and verbal protesting (n=8).

Teacher interventions in pretend aggression. Teachers intervened in 42% (n=33) of
the 79 war play episodes. In episodes of pretend aggression, teachers frequently directed
(n=19), stated classroom rules (n=18), asked questions (n=10), gained children’s attention
(n=10), and provided information (n=6) (see Table 10). Suggesting an alternative (n=5) was
the only teacher intervention in episodes of pretend aggression that was not found in episodes
of real aggression. Suggesting an alternative involves asking or directing the children to
participate in an activity that does not include pretend aggression. An example of a teacher
intervention is presented below.

In the following scenario, a group of boys were playing Power Rangers on the
playground. Sara, the head teacher, intervened in the children’s pretend aggression by gaining
the children’s attention, giving them directions, and asking questions. The intervention ended
when Sara suggested an alternative activity to the boys.
Table 10. The frequencies of teacher interventions in pretend aggression

<table>
<thead>
<tr>
<th>Teacher Intervention</th>
<th>Pretend Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active listening</td>
<td>6</td>
</tr>
<tr>
<td>Apology</td>
<td>0</td>
</tr>
<tr>
<td>Consequence</td>
<td>2</td>
</tr>
<tr>
<td>Counting</td>
<td>0</td>
</tr>
<tr>
<td>Direction</td>
<td>19</td>
</tr>
<tr>
<td>Examine Injury</td>
<td>2</td>
</tr>
<tr>
<td>Explain</td>
<td>7</td>
</tr>
<tr>
<td>Feeling</td>
<td>0</td>
</tr>
<tr>
<td>Follow child</td>
<td>0</td>
</tr>
<tr>
<td>Gain attention</td>
<td>10</td>
</tr>
<tr>
<td>Give object back</td>
<td>0</td>
</tr>
<tr>
<td>Inform</td>
<td>6</td>
</tr>
<tr>
<td>Offer solution</td>
<td>0</td>
</tr>
<tr>
<td>Positive reinforcement</td>
<td>7</td>
</tr>
<tr>
<td>Question</td>
<td>10</td>
</tr>
<tr>
<td>Remove child</td>
<td>1</td>
</tr>
<tr>
<td>Remove object</td>
<td>0</td>
</tr>
<tr>
<td>Share experience or feeling</td>
<td>0</td>
</tr>
<tr>
<td>State a rule</td>
<td>18</td>
</tr>
<tr>
<td>Suggest an alternative</td>
<td>5</td>
</tr>
<tr>
<td>Sympathize</td>
<td>0</td>
</tr>
<tr>
<td>Teacher presence</td>
<td>0</td>
</tr>
<tr>
<td>Tell child what to say</td>
<td>1</td>
</tr>
</tbody>
</table>

Kevin said, "The white tigers. The white guy." Tim asked, "Can I be the white tiger?" Tim and Evan picked up sticks from the ground and ran. Will ran toward Evan. Tim and Evan pointed their sticks, like guns, at Will and shot him. Will shot back, then walked toward the shed. Kevin was running. Sam said, "I can go farther than you, right? Because I want to do karate." Will did a few karate kicks. Tim said, "This is my gun." Will said, "Hi yah!" Will did another karate kick. Tim ran. Sam hit Will twice. Kevin pushed Will. Evan put his stick on Will. Pam, a graduate student assistant, said, "Tim, put your stick down." Tim asked, "Why?" Pam said, "Because I didn't like the way you are playing with it. Put the stick down. You need to respect me." Tim ran behind the shed. Evan did a karate kick. Evan tackled Will and then ran. Sam pretended to kick Will. Sam tackled Will, then ran into him. Will swung his arms. Evan grabbed Will. Will kicked and pushed Evan. Sam ran into Will. Sara, the head teacher said, "Boys! Evan, Sam, come here! Come sit down! Come sit down! What happened? Tell me." Kevin said, "He pushed me down first." Evan is punching
the air. Kevin said, "You started to punch." Sara talked to the children. Then she asked each boy, "Are you okay? Do you know the boundary? No kicking, no grabbing, no punching, no using sticks." Then Sara asked each child, "Can I trust you?" Then she suggested that the boys stand on a tree stump, count, and then jump. The boys formed a line behind the tree stump. Each boy took a turn jumping. (Video 112197)

This superhero play took place outside and involved shooting and rough-and-tumble play. The episode contained two teacher interventions. In the first intervention, Pam, a graduate assistant, directed Tim to put the stick he was carrying down on the ground. After Tim questioned her direction, Pam informed him that she did not like how he was using the stick and directed him to put the stick down again. Tim complied with the teacher’s request and left the superhero play by running behind the shed. The remaining boys continued their pretend aggression as they kicked and tackled each other, until Sara, the head teacher, intervened. At first, Sara used strategies such as gaining the boys attention, directing them to sit down, and questioning them about their activities. She listened to the boys explanation and stated the playground rules. Sara completed the intervention by suggesting the alternative activity of jumping off the tree stump. With Sara's help, the boys abandoned their aggressive play and began the new activity.

When an adult intervened in an episode of pretend aggression, the children were most likely to comply with the adults' directions (n=18). The children also shared information with the adult (n=13) and other children (n=14). In the previous scenario, Kevin informed the head teacher, Sara, that someone pushed him. The boys also complied with Sara's directions to sit down and later to participate in the alternative activity. The boys complied with the teacher’s directions by forming a line and taking turns jumping off a tree stump.

Termination of the pretend aggression. An interaction of pretend aggression was most likely to end because the target was not human (n=78). In the following example, the target of the aggression was an imaginary character that could not respond to the child’s pretend aggression; therefore the aggressive interaction between the character and the child stopped.
Tim said, "I tell you that a bad guy was going to go in [the house]. Hey! The bad guy is going in your house." Kevin shot the bad guy. Tim said, "Ohhh!" Kevin said, "Hey, can you get me some more blocks?" (Field Note 091797)

The interaction ended when the aggressor, Kevin, shot the bad guy. The target could not respond to the aggressive shooting behavior, because the bad guy was an imaginary character.

When the target was human, the aggression ended when a child initiated a new act of aggression (n=53), an adult intervened (n=23), or the aggressor stopped aggressing (n=16). The aggression in an interaction also terminated when the interaction was interrupted by a third person (n=16). In 16% (n=13) of the pretend aggression episodes, the interaction was interrupted by a child intervention. When children intervened in episodes of pretend aggression they were most likely to provide information (n=4), tell a teacher (n=4), ask a question (n=4), or state a rule (n=2). Although not frequently involved in the episodes of pretend aggression, Carla, Nina, and Scott were more likely to intervene in their peer's episodes of pretend aggression than the other children in the classroom. However, the children intervened in different ways. For example, Nina intervened in pretend aggression by telling the teacher. In the next episode, Nina intervened in an interaction between Ted and Wade when they were initiating pretend aggression with dinosaurs on the large blue carpet.

Wade was hitting the tyrannosaurus rex dinosaur with another dinosaur. Wade said, "Let's say if the mouth is closed, it's a good guy and if the mouth is open it's a bad guy. This is a good guy." Wade holds up a dinosaur. Ted said, "Yeah, and I have a sting ray tail so I can buzz him ooooow zzzzzz! I'm the bad guy commander. Oh yeah!" He made the dinosaur do a somersault. Ted said, "Chop, chop! Kill him, kill him! I'm hurting the shield. I'm hurting the shield." Ted was hitting one of Wade's dinosaurs. Wade hit Ted's dinosaur. Ted said, "I see another guy. I can kill this guy all by myself. Look I broke his neck. I killed him with my horn." Wade was hitting a dinosaur. He said, "Look, oh no! I broke his head. I broke it." (Wade had actually broken the toy dinosaurs head.) Ted said, "Yeah you did. I'm surrounded by bad guys and ladders." Wade asked, "Where are you?" Ted said, "I'm over here where the bad guys are and the ladders." Nina watched Ted and Wade as they hit each other's dinosaurs and threw them. Then she said, "I'm going to tell Kate that you two are hitting dinosaurs." Kate, the student teacher, walked over to the blue carpet where they were playing with the dinosaurs. Kate said, "No throwing the dinosaurs. People
on the floor, play nicely with them." After Kate left Nina said, "I told on you guys, because I saw Wade hitting your dinosaur. I kinda saw your dinosaur hitting Wade's." Ted said, "Un-huh." Nina said, "Oh yes you were and Kate said she's going to watch you so you better be good." Ted threw a dinosaur. Nina said, "I'm really sorry, but you threw a dinosaur. Kate!" Kate said, "No throwing dinosaurs. People on the floor play nice with the dinosaurs." (Field Note 101797)

Nina watched Ted and Wade as they hit each other's dinosaurs and threw them across a large blue carpet. Nina informed Kate, the student teacher, that the boys were hitting and throwing the dinosaurs. Kate directed the boys to play nice with the dinosaurs. Nina explained why she had to tell the teacher about their behavior. When Ted protested, she insisted that Ted was hitting Wade's dinosaur. She also warned them that they better be good, because the student teacher was watching them. When Ted ignored the warning by throwing the dinosaur, Nina apologized, but informed them that she must tell the teacher about their behavior again. The teacher intervened a second time reminding the boys to play nicely with the dinosaurs.

In contrast, Scott was more likely to intervene when an adult was talking to the children about their behavior. He would support the teacher's intervention by suggesting alternatives to the children's current behavior. For example, one day Tim and Will used plastic manipulatives to build guns and shoot them at one another. Pam, the graduate assistant, walked over to the table.

Pam said, "You can make spaceships or cars with this, but not guns. There's no shooting. You will have to find something good to do." Scott intervened, "You could make a robot. This is allowed." Scott held up the plastic pieces. Then he said, "But this is not." He held up the same plastic pieces, but in a shooting position. (Video 102497)

Scott did not directly intervene in the children's play, because he was uncomfortable with conflict. In an interview, Scott's mother said, "I think he's still in the process of dealing with situations that are confrontational....I think he is still learning to deal with relationships. He's a friendly character, but if he gets teased or if a friend of his gets teased, he gets very
upset about it. He has a hard time with teasing and how he's supposed to deal with it" (Interview 041698).

Although there were several reasons why an interaction of pretend aggression between two children stopped, the children were more likely to stay together (n=63) than they were to separate (n=7) at the end of the episode. However, in five episodes of pretend aggression, the children were participating in solitary play and the outcome status of four episodes were unknown.

Summary of pretend aggression. In summary, Kevin, Tim, Will, Ted, and Sam acted out episodes of pretend aggression using cars and blocks on the blue carpet or at the tables using battleships made out of geometric plastic pieces. The boys also incorporated pretend aggression and rough-and-tumble play into their superhero scenarios on the playground. As aggressors, Kevin, Ted, Sam, Tim, and Will often shot, threatened, hit, chased, or blew up imaginary characters and objects. When the boys were targets of pretend aggression they provided information, ignored, hit, ran away, or provided a verbal protest to their peers.

Teachers intervened in 42% of the episodes often giving children directions or stating rules. Children responded to the teacher by sharing information with the adult or other children and complying with the adults directions. Pretend aggression commonly stopped because the target of the aggression was an imaginary character who could not respond to the behaviors of the aggressor. However, when the target was human, a sequence of aggression terminated when a new act of aggression was exhibited. Finally, the children were most likely to stay together, rather than separate after an episode of pretend aggression.

Real aggression

According to Carlsson-Paige and Levin (1987), proponents of the sociopolitical view suggest that adults should discourage children from play that involves pretend aggression because it may contribute to children's real aggression. The following paragraphs examine the real aggression displayed by the children in the context of the kindergarten classroom.
Area in the room where real aggression occurred. Real aggression occurred in many areas of the room and outside on the playground (see Table 11). Similar to pretend aggression, the most popular sites for real aggression were a large blue carpet (n=39) used for floor play or gross motor activities and tables (n=31) located on the main floor of the classroom. It was also common for real aggression to occur on the balcony (n=21), on the playground (n=19), and on the red carpet (n=11). The red carpet was a rectangle area rug, half the size of the blue carpet, located on the opposite side of the room. This rug was used for large motor activities and large manipulatives. Manipulatives used for construction including Legos (n=8), blocks (n=7), waffle blocks (n=6), and vehicles such as cars (n=6) were the most common materials involved in episodes of real aggression (see Table 12).

Key players in real aggression. Real aggression was more common in the classroom than pretend aggression. Compared to the 79 episodes of pretend aggression, I identified 130 episodes that contained real aggression. Boys participated in 91% of the episodes and girls

Table 11. The frequencies of the area in the classroom where real aggression occurred

<table>
<thead>
<tr>
<th>Area in classroom</th>
<th>Real aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art area</td>
<td>1</td>
</tr>
<tr>
<td>Balcony</td>
<td>21</td>
</tr>
<tr>
<td>Basin</td>
<td>1</td>
</tr>
<tr>
<td>Bathroom</td>
<td>2</td>
</tr>
<tr>
<td>Blue carpet</td>
<td>39</td>
</tr>
<tr>
<td>Brown carpet</td>
<td>3</td>
</tr>
<tr>
<td>Cubby</td>
<td>2</td>
</tr>
<tr>
<td>Outside</td>
<td>19</td>
</tr>
<tr>
<td>Red carpet</td>
<td>11</td>
</tr>
<tr>
<td>Snack table</td>
<td>1</td>
</tr>
<tr>
<td>Tables</td>
<td>31</td>
</tr>
</tbody>
</table>
Table 12. The materials most frequently involved in real aggression

<table>
<thead>
<tr>
<th>Materials</th>
<th>Real aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blocks</td>
<td>7</td>
</tr>
<tr>
<td>Cars</td>
<td>6</td>
</tr>
<tr>
<td>Drawing</td>
<td>5</td>
</tr>
<tr>
<td>Easel</td>
<td>3</td>
</tr>
<tr>
<td>Flashlight</td>
<td>3</td>
</tr>
<tr>
<td>Geometric connecting pieces</td>
<td>3</td>
</tr>
<tr>
<td>Ego</td>
<td>8</td>
</tr>
<tr>
<td>Mail pulley</td>
<td>3</td>
</tr>
<tr>
<td>Plane</td>
<td>3</td>
</tr>
<tr>
<td>Playdough</td>
<td>4</td>
</tr>
<tr>
<td>Small Blocks</td>
<td>3</td>
</tr>
<tr>
<td>Waffle blocks</td>
<td>6</td>
</tr>
</tbody>
</table>

participated in 37% of the episodes. Boys were the only participants in 80 episodes. Girls and boys participated together in 38 episodes and girls were the only participants in 12 episodes. All 20 children participated in at least one episode of real aggression (see Table 13). The children who most frequently participated were Evan (n=57), Tim (n=55), Kevin (n=40), Will (n=30), Ted (n=25), and Sam (n=21). Each of these boys, except for Evan, was also a frequent participant in episodes of pretend aggression.

Evan participated in more episodes of real aggression than any other child in the classroom. He was frequently involved in bullying episodes where he initiated real aggression without having identified a clear goal for his behavior. The frequency of aggressive behaviors displayed by Evan may be due to his developmental delays. According to Sara, the head teacher, Evan was developmentally similar to a 4-year-old child. She also suggested the developmental delays may be attributed to the two years he spent in a Russian orphanage. In
Table 13. The frequencies of children participating in real aggression

<table>
<thead>
<tr>
<th>Boys</th>
<th>n</th>
<th>Girls</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evan</td>
<td>57</td>
<td>Amy</td>
<td>19</td>
</tr>
<tr>
<td>Keith</td>
<td>6</td>
<td>Carla</td>
<td>10</td>
</tr>
<tr>
<td>Kevin</td>
<td>40</td>
<td>Eve</td>
<td>14</td>
</tr>
<tr>
<td>Pete</td>
<td>16</td>
<td>Jasmine</td>
<td>14</td>
</tr>
<tr>
<td>Sam</td>
<td>21</td>
<td>Jill</td>
<td>7</td>
</tr>
<tr>
<td>Scott</td>
<td>10</td>
<td>Karen</td>
<td>5</td>
</tr>
<tr>
<td>Ted</td>
<td>25</td>
<td>Kathy</td>
<td>7</td>
</tr>
<tr>
<td>Tim</td>
<td>55</td>
<td>Lynn</td>
<td>2</td>
</tr>
<tr>
<td>Wade</td>
<td>8</td>
<td>Mary</td>
<td>5</td>
</tr>
<tr>
<td>Will</td>
<td>30</td>
<td>Nina</td>
<td>11</td>
</tr>
</tbody>
</table>

In addition, Evan had medical conditions that contributed to his unpredictable behaviors. For example, Evan's frequent ear infections may be the reason for his unpredictable screams. Because Evan used behaviors that were hurtful and offensive to others, Evan needed more teacher supervision than his peers. In an interview, Sara said, "Some 4-year-olds' need a teacher to assist that person and that's how I see Evan" (Interview 121097). Throughout the kindergarten year, Evan worked on developing a sense of internal control. At the end of the year, Evan's mother commented, "I think he learned to be respectful of the main teacher and he learned he had to be respectful of other people. I don't think that is easy for him" (Interview 060998).

Although Evan was very social, his frequent displays of aggression revealed that he lacked some important social skills. In individual interviews, several kindergarten children indicated that they did not prefer Evan as a playmate. For example Nina said, "He always hits and screams, and sometimes he doesn't..." (Interview 120597). Erin said, "I don't like him at
all, because he screams at me all the time and it hurts my ears" (Interview 120597). In the interviews, some of the children labeled Evan. Wade said, "Evan's bad, because he do bad things" (Interview 120597). However, other children seemed to understand that Evan was delayed in his development and they viewed him as younger or less intelligent than themselves. For example, one day Amy accused Evan of lying. She said, "We're not supposed to lie." Nina said, "Amy don't. Evan doesn't understand much. Well, just don't blame him, right Eve?" (Field Note 100897). Nina implied that Evan was not as intelligent as his peers were, so he could not be blamed for lying. Evan also knew that he was not as capable as his peers were and was aware of their opinions of him. One day he said, "You hate me. You think I'm dumb. If you are dumb. I'm dumb. I am dumb" (Field Note 111497). Over the semester, Evan's competence in social situations improved. Toward the end of the year, Evan was able to assume leadership positions in play and his classmates were eager to follow his lead.

Tim, Kevin, Will, Ted, and Sam were also frequent participants in episodes of real aggression, but unlike Evan, they were typically developing children. These five boys played together and the majority of their aggressive acts remained within the group. However, Tim was the most frequent participant in the aggressive interactions. Similarly, when Sam and Ted played with Kevin, Will, and Tim, real aggression was most likely to occur in interactions with Tim. They were most likely to initiate aggression toward Tim and be the target of Tim's aggressive behaviors. Real aggression between Sam and Ted only occurred in one episode of real aggression.

Almost every day, Kevin, Tim, and Will played together and came into conflict with one another. In an interview with the head teacher, Sara commented that Kevin, Tim, and
Will's friendship had been consistent over the year, but she also said, "I don't know if I'd call it a friendship or a family" (Interview 042998). They considered themselves friends, but often came into conflict regarding their play and their relationships with each other. Tara, a graduate assistant in the classroom, said, "Tim, Will, and Kevin, those three always play together, but they also fight together. Also like a friendship. He doesn't want to be my friend. He wants to be my friend... They talk like now I want to be this person's friend, not the other one. It hurts the other child's feelings" (Interview 040198). Kevin confirmed Tara's observation. In an interview, I asked Kevin if Tim and Will like to do some of the same things together. He said, "No, well, they just do different things, so they always fight about like this, 'He's my friend.' 'No, he's my friend.' They always fight about who am I his friend. I always say, both of them. Tim and Will, they keep asking who are your friend, who is your friend?" (Interview 120597). Tim and Will had a conflicting relationship because they both looked up to Kevin and wanted his attention. In an interview with Tim, I asked why he liked to play with Kevin. Tim said, "Because he's my best buddy and he's my best friend." But, in the same interview, Tim indicated that he did not like to play with Will. At that time Tim said, "I hate him" (Interview 120597). In a separate interview, the other graduate assistant, Pam said, "Kevin, Tim, and Will try to play together, but sometimes things don't work out" (Interview 030698).

Although girls were not frequently involved in episodes of aggression, Amy was the girl involved in the most episodes of real aggression. The children came into conflict with Amy because she liked to control the children's play. In an interview Scott said, "Sometimes she [Amy] tells me what to do" (Interview 120597). Sara, the head teacher, also commented on Amy's controlling behavior. Sara said, "I thought she was very bossy and never really had a friend..." (Interview 121097). But Sara also saw the positive side of Amy's controlling behavior. Sara said, "She's a very assertive person....a great leader" (Interview 121097).
Sequence of the real aggression. Similar to the sequence of pretend aggression, the episodes of real aggression began when an aggressor initiated an act of aggression toward a target. The aggressor and the target were children in the kindergarten classroom. The children's real aggression toward adults was not included in the analysis. Many interactions consisted of an aggressor's initiation followed by the target's reply, but other interactions consisted of several turns by both the aggressor and the target. I refer to the behaviors following the target's reply to the initial aggression as the aggressor's response to the target or target's response to the aggressor.

After the initial aggression and the target's reply, the aggressor and the target may continue interacting or a new act of aggression may be initiated. Although 80% of the real aggression episodes consisted of a single initiation of aggression, new initiations of aggression occurred when a child outside the existing aggressive interaction became the new target of aggression or initiated an act of aggression toward a peer. New initiations occurred in only 19% of the real aggression episodes.

Children outside the aggressive interaction became involved in the aggressive episode if they intervened in an aggressive interaction or if they interrupted the interaction by focusing on a topic other than the current behaviors of the aggressor and the target. An adult was often the final player in the aggressive episodes. The adult intervened to stop the aggression and the child responded to the adults' behaviors. The sequence of real aggression is illustrated in Figure 6.

In the scenario used to demonstrate the sequence of aggressive episodes (Figure 6), Will initiated aggression toward Evan by calling him an offensive name. This type of unprovoked aggression is called bullying. Bullying occurred when an aggressor coerced, intimidated, made fun of, taunted, or assaulted another child without a clear goal for the
<table>
<thead>
<tr>
<th>1</th>
<th>Initial Aggression</th>
<th>2</th>
<th>New Aggression</th>
<th>3</th>
<th>Target Reply</th>
<th>4</th>
<th>Aggressor's Response to Target</th>
<th>5</th>
<th>Target's Response to Aggressor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Will: &quot;Hi Chicken Pox!&quot;</td>
<td></td>
<td>Evan: &quot;Hi Underwear!&quot;</td>
<td></td>
<td>Will: &quot;Underwear?&quot;</td>
<td></td>
<td>Evan: &quot;Yeah, your stinking underwear!&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>Will: &quot;Your Underwear!&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Evan: &quot;Liar, liar pants on fire.&quot;</td>
<td>Nina: (No response)</td>
<td></td>
<td>Evan: &quot;Liar, liar pants on fire you are sticking on a wire.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ted: &quot;Liar, Liar.&quot;</td>
<td></td>
<td>Evan: &quot;Ted is liar, liar pants on fire your sticking on a wire.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tim: &quot;Liar, liar. Evan, Liar, liar pants on fire you are sticking on a wire.&quot;</td>
<td>Evan said, &quot;Liar, liar pants on fire you are stupid!&quot;</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Evan: Walked back to the balcony and sat on the bench with Ted. Evan threw two markers down at Tim.</td>
<td>Tim: &quot;Hi Evan. Chicken Pox!&quot;</td>
<td>Evan: Threw a third marker.</td>
<td>Tim: &quot;Evan Chicken Pox!&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>Evan threw a fourth marker.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ted: &quot;Liar, liar pants on fire hanging on a telephone wire.&quot;</td>
<td>Evan: (No Response)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Figure 6. The sequence of real aggression
<table>
<thead>
<tr>
<th></th>
<th>Child Intervention</th>
<th>7</th>
<th>Response to Child Intervention</th>
<th>8</th>
<th>Adult Intervention</th>
<th>9</th>
<th>Response to Adult Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nina: &quot;Evan, I don't think that's a good idea to say.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sam: Tim, Evan is calling you liar, liar pants on fire hanging on a telephone wire.&quot;</td>
<td>Tim: &quot;Wire?&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sam: &quot;Yes wire. Like the telephone wire.&quot;</td>
<td>Tim: &quot;Oh, that's not nice.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>Tara: &quot;Evan, what are you doing?&quot;</td>
<td></td>
<td></td>
<td>Evan: &quot;I went like that.&quot; He lifts a marker up into the air as if he were planning to throw it.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tara: &quot;Evan, leave the markers up on the balcony.&quot; Tara held onto Ted's shoulder and walked him down the balcony steps.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
behavior (Coie et al., 1991). In episodes of real aggression, bullying occurred in 53% (n=70) of the episodes and instrumental aggression occurred in 36% (n=45) of the episodes. Reactive aggression, the aggressive responses accompanied by anger or distress (Coie et al., 1991), occurred in only 10% (n=15) of the real aggression episodes.

The aggressor in real aggression. When an aggressive interaction occurred between two children, one child became the aggressor or the person who initiated the aggressive act and the other child became the target of the aggression. Some children were more likely than others to assume the role of the aggressor, whereas other children were more likely to be the target or victim of the aggression.

Evan (n=47), Tim (n=24), and Amy (n=12) initiated real aggression more frequently than the other children in the classroom (see Table 14). Evan initiated real aggression in 42% of the aggressive episodes involving both girls and boys. Amy initiated real aggression in 69% (n=9) of the 13 episodes that included a girl initiating real aggression against a boy. Children who initiated real aggression frequently grabbed (n=24), taunted (n=23), name-called (n=20), pushed (n=16), or threw an object (n=15) (see Table 15).

Grabbing was the most common behavior chosen to initiate aggression. In the scenario below, Tim and Kevin wanted to put the same puzzle together. Tim initiated an aggressive interaction by grabbing the puzzle out of Kevin's hand.

Kevin was holding a puzzle. Tim grabbed the puzzle out of Kevin's hand. When Kevin reached for the puzzle, Tim pulled the puzzle out of his reach. Kevin put his hand up like he was going to hit Tim and said, "I'm going to tell Sara. Sara!" (Field Note 101097)
Table 14. The frequencies of children who initiated real aggression

<table>
<thead>
<tr>
<th>Name</th>
<th>Initial aggression n</th>
<th>New initiations of aggression n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evan</td>
<td>47</td>
<td>17</td>
</tr>
<tr>
<td>Keith</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Kevin</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Pete</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sam</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Scott</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ted</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Tim</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Wade</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Will</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amy</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Carla</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Eve</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Jasmine</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Jill</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Karen</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Kathy</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Lynn</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mary</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Nina</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 15. The frequencies of the real aggressive behavior

<table>
<thead>
<tr>
<th>Real aggression</th>
<th>Initial aggression</th>
<th>New initiation of aggression</th>
<th>Aggressor response to target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Chase</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Destroy property</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Gossip</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Grab</td>
<td>24</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Hit</td>
<td>9</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Hit object</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Insult</td>
<td>6</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Intrude on privacy</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Kick</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Knock</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Name call</td>
<td>20</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Pull</td>
<td>8</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Push</td>
<td>16</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Stand/sit on body</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stop play</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Taunt</td>
<td>23</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Tease</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Threaten</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Throw</td>
<td>15</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Walk/run into</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wave</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wrestle</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Write on</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

This example demonstrated the instrumental aggression that occurred within the context of a conflict. Instrumental aggression occurred when the aggressor used aversive means to obtain a goal (Coie et al., 1991). In this episode, Tim and Kevin were in conflict over the possession of a puzzle. Tim initiated instrumental aggression when he grabbed the puzzle from the target child, Kevin. Kevin responded to the aggression by reaching for the puzzle piece and threatening to hit Tim, before telling the teacher.
When an aggressive interaction between two people continued, the aggressor’s response to the target was similar to the initial behaviors. The aggressor was most likely to continue grabbing (n=13), pulling (n=11), or taunting (n=11) the target after the initial aggression. In the following example, Will, Kevin, and Evan were putting tape on a wooden structure. Evan, the aggressor, used pulling in his remaining response to the target.

Kevin said, "Will, Will." Evan said, "Hey stop that." Will took a piece of masking tape off the roll of tape. Evan said, "Hey, I want that back. Evan grabbed the tape and pulled. Evan said, "Give it to me." Will pulled on the tape. Evan pulled on the tape. Will let go. Evan used the tape he obtained from Will. Will walked over to the art shelf and picked up another roll of tape. (Video 092498)

After Evan initiated aggression by grabbing and pulling on Will’s tape, Will responded by pulling back on the tape. Evan's continued response was to pull on the tape again.

Within episodes of real aggression, Evan (n=17) and Tim (n=13) initiated new acts of aggression more frequently than the other children in the classroom. Similar to the initial acts of real aggression, the most frequent new initiations were taunting (n=11) and grabbing (n=9). Pulling (n=7) and hitting (n=6) were also common in the new initiations of real aggression. In addition, new initiations of aggression introduced behaviors that were not observed in the initial aggression. These behaviors included gossiping (n=1), hitting objects (n=2), teasing (n=4), and wrestling (n=1).

Several new initiations of aggression occurred throughout the next episode including a session of taunts. First, Evan was on the balcony pushing a shopping cart toward Ted who was sitting on a yellow bench. Then, Evan initiated aggression toward Kevin, Will, and Tim who were on the main level of the classroom next to the balcony. Evan greeted the three boys in a tone of voice they found offensive. Evan began an interchange of taunting when he initiated a new act of aggression by taunting at Nina who intervened trying to stop the aggression.
Evan pushed a shopping cart into the yellow bench, moving it and Ted. Ted said, "Stop it Evan." Evan said something and pushed the cart into the bench again. Ted asked Evan to stop again. Evan said, "You're a pee head. I am a pee head." Evan hit the shopping cart on something. Evan said, "Ow, ow, ow. Yah! yah!" Evan walked down from the balcony to Kevin and Will who were working with scrounge material on a metal desk. Evan said, "Hey busters!" Will said, "Hey busters? Hi chicken pox!" Evan said, "Hi underwear!" Will asked, "Underwear?" Evan said, "Yeah, stinking underwear!" Will said, "You're underwear!" Tim said, "Tara, Will called me underwear." Will protested, "No Evan, say underwear." Nina said, "Evan, I don't think that's a good idea to say." Evan said, "Liar, liar, pants on fire!" Ted said, "Liar, liar!" Evan said, "Ted is a liar! Liar, liar, pants on fire, you're sticking on a wire." Tim said, "Liar, liar! Evan, liar, liar, pants on fire. You are sticking on a wire." Evan said, "Liar, liar, pants on fire. You are stupid!" Sam said, "Tim, Evan is calling you liar, liar, pants on fire hanging on the telephone wire." Tim asked, "Wire?" Sam said, "Yes, wire. Like telephone wire." Tim said, "Oh, that's not nice." Evan went back to the balcony and over on the bench with Ted. Evan threw two markers down from the balcony. Tim said, "Hi Evan, chicken pox!" Evan threw a third marker. Tim said, "Evan, chicken pox!" Evan threw a fourth marker. Ted said, "Liar, liar, pants on fire hanging on the telephone wire." Tara, a graduate assistant, asked Evan, "What are you doing?" Evan said, "I went like this." Evan held a marker up in the air as if he were planning to throw it. Tara asked, "Leave the markers on the balcony." Tara held Ted by the shoulder and walked him down the stairs of the balcony. Evan said, "Chicken, bawk, bawk." Ted ran after Evan. (Video 111797)

The children in this episode initiated eight acts of aggression. First, Evan used the shopping cart to push a bench Ted was sitting on. Then, Evan walked down from the balcony and initiated a new act of aggression by calling Will and Tim names. A session of taunting began when Nina intervened and informed Evan that it was not a good idea to call people names. Evan responded by taunting her with a common childhood song. Ted and Tim initiated aggression by taunting Evan who responded by taunting back with the same song. Tim interrupted initiating the fifth act of aggression. Tim taunted Evan who again responded by taunting back and then insulting Tim. Evan went back to the balcony and threw markers down at Tim and Kevin. Tim responded again by calling Evan a name. The interaction continued with Evan throwing a third marker. Ted initiated a new act of aggression by taunting Evan again. After questioning Evan about his behavior, Tara directed Evan to leave
the markers on the balcony. She also removed Ted from the balcony. Evan initiated the final act of aggression when he taunted Ted and Ted responded by chasing Evan.

**The target in real aggression.** Frequent targets in episodes of real aggression were Kevin (n=23), Will (n=20), Tim (n=20), and Ted (n=13) (see Table 16). Target children frequently responded to the aggressors’ behaviors by informing their peer (n=13), verbal protesting (n=12), directing (n=8), or pulling on an object (n=8) (see Table 17).

In the following scenario, Ted was the target of Tim’s aggression. Tim and Ted were sitting at a table building battleships out of plastic geometric shapes. Ted used strategies including providing Tim with information in response to Tim taking a piece of plastic from Ted.

Tim took a piece of plastic off Ted’s ship. Ted said, "Hey, my ship Tim." Ted threw a piece of plastic. He said, "I'm going to play somewhere else and if you come, I'm going to leave." Ted walked over to Kate and said, "Tim broke my ship." Kate said, "What did you tell him?" Ted said, "To stop, and he wrecked my ship." Kate said, "Tim, are you respecting what Ted is saying?" Tim said, "No." Kate said, "You wrecked something he made. You need to respect when Ted asks you to stop something you need to listen to him and respect him." Tim said, "Okay." Kate said, "Can you rebuild the ship Ted?" Ted said, "I don't know how to build it." Kate said, "Maybe you could build even a better one. Make a better one." Tim said, "But I built this one and I hate this one." Kate said, "If you don't like it you could take it apart and build something else." Tim said, "I will save it, but I hate it." Ted said, "Okay, give it to me." Tim said, "No." Ted said, "But you don't like it." Tim said, "I do now." (Field Note 101597)

Ted, the target in this example, used several responses after Tim grabbed a piece of plastic off the ship he created. Because Tim was aggressive, Ted no longer wanted to play with him. Ted’s reply to Tim’s aggression was to inform Tim that the plastic pieces were from his ship and that he was planning to play somewhere else in the classroom. However, Ted did not carry out his plan. Instead, he asked a teacher to intervene and with the teacher’s help continued building ships with Tim.
Table 16. The frequencies of children who were the targets of real aggression

<table>
<thead>
<tr>
<th>Name</th>
<th>Initial target</th>
<th>New target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evan</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Keith</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Kevin</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Pete</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Sam</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Scott</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ted</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Tim</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Wade</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Will</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amy</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Carla</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Eve</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Jasmine</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Jill</td>
<td>2</td>
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</tr>
<tr>
<td>Karen</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Kathy</td>
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<td>0</td>
</tr>
<tr>
<td>Lynn</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mary</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Nina</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 17. The frequencies of the target’s response to real aggression

<table>
<thead>
<tr>
<th>Target response</th>
<th>Initial target</th>
<th>New target</th>
<th>Target response to aggressor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Nonaggressive</td>
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<td></td>
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<tr>
<td>Agree</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Cry</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Direction</td>
<td>8</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Explain</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gain attention</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Give object</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Gossip</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Follow</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>I'm telling</td>
<td>0</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Ignore</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Inform</td>
<td>13</td>
<td>2</td>
<td>41</td>
</tr>
<tr>
<td>Laugh</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Leaves</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Move away</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Move object</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Negative emotion</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Offer solution</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>State rule</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Scream</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Verbal protest</td>
<td>12</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Aggressive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chase</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Destroy</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gossip</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grab</td>
<td>9</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Hit</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Hit object</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Insult</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Kick</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Knock</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Name-call</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Pull</td>
<td>15</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Push</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Tackle</td>
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<tr>
<td>Taunt</td>
<td>7</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 17. (continued)

<table>
<thead>
<tr>
<th>Target response</th>
<th>Initial target n</th>
<th>New target n</th>
<th>Target response to aggressor n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threaten</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Throw</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Wave stick</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wrestle</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Write on</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

When two children continued interacting in an episode of aggression, the target's response to the aggressor was similar to the initial behaviors. In real aggression the target frequently responded to the aggressor by informing (n=41), directing (n=13), verbal protesting (n=12), pulling (n=10), or saying "I'm telling" (n=9). It was also common for the target to respond to the aggressor by grabbing (n=6) or taunting (n=6).

In the next example, a puppet theater was set up in the classroom on the red carpet. An episode of instrumental aggression began when Will and Tim grabbed and pulled on the same puppet. The real aggression between Will and Tim stopped when Kevin initiated a new act of aggression against Tim.

Will said, "These are my puppets." Kevin said, "You have to share." Will said, "I found the puppet first. I found two puppets first." Tim grabbed Will's puppet and pulled. Will pulled the puppet back. Then, Tim pulled on the puppet and Will pulled on the puppet. Tim pulled on the puppet again. Will said, "I found the puppet first." Kevin pulled on the puppet. Kevin said, "I'm giving this to him." Kevin pulled the puppet away from Tim and gave it to Will. Then Kevin asked, "Can I have one of them? Can I have a puppet?" Kevin pulled on the puppet. Tim pulled on the puppet. Kevin said, "I got the puppet." I asked Tara, a graduate assistant, to come over to the puppet theater. Tara talked to Kevin and Tim about sharing the puppets. Tim said, "Now, here's a puppet." Kevin said, "No one's going to give me a puppet. I don't want that puppet." Tim said, "I had it first." Kevin said, "I don't have your puppet." Tara explained that they could hold up a stuffed animal and use it like a puppet. Tara
demonstrated how to hold the stuffed animal. Kevin said, "But those are not puppets." The boys continued to play with the puppets. (Field Note 091097)

There were two initiated acts of aggression in this episode of instrumental aggression. In the first aggressive interaction, Tim grabbed a puppet from Will. The remaining responses consisted of Tim and Will pulling back and forth on the puppet. After Will informed Tim that he had the puppet first, Kevin intervened by pulling the puppet away from Tim and giving it back to Will. Then, Kevin asked if he could have the puppet. He initiated a second aggressive interaction by pulling on the puppet Will was holding. Tim pulled on the puppet too, but Kevin succeeded in retrieving the puppet and informed Tim that he got the puppet. Tara, the graduate assistant, intervened by offering the solution of using a stuffed animal as a puppet.

As illustrated in the puppet fight, episodes of real aggression may consist of one or more new initiations of aggression. Will (n=15) was a frequent target of Tim's new initiations of real aggression. As mentioned previously, Will and Tim had a love/hate relationship. They played with each other, but they also came into conflict. In addition, Will may have been a target of the children's aggression, because he was one of the least popular children in the classroom. Will may have been an easy target for children's aggression because he had recently traveled to the United States from China and was just beginning to speak and understand English. He also spent more time than the other boys interacting one-on-one with adults writing, drawing, and creating art activities. At times, he could also be very passive to the children's aggressive behaviors and he tried harder than the other boys to gain friendships and become part of the group. He would share candy that he brought to school with his peers and sometimes he used the candy as a bribe to get to play with a certain person or toy.

Will and other children who were targets of the new initiations of real aggression often ignored or did not respond to the aggressor, but when they did respond they were most likely to pull on an object (n=7) or state a verbal protest (n=4). In the next example, Tim initiated real aggression against Will when a teacher was intervening in a conflict.
Sara was helping Will and Tim make a compromise. Sara said, "Will, did you hear what Tim said? He said when you’re done with the puzzle and you put it away, can he have it? You can tell him yes or no." Will said, "No." Sara said to Tim, "He said no." Then to Will she said, "What are you going to do with it when you put it away?" Tim kicked the puzzle. Sara said, "No kicking it. You can say, I'm mad Will, but no kicking it. No kicking the puzzle even when you’re mad." Tim said, "Then I'm going to bump it." Sara said, "You're so mad, you want to break it. You know what? This is very, very hard, very, very hard." Tim hit Will. Will said, "No, no, no." Tim said, "Yes, yes, yes. Noooo." Sara said, "Now you say yeah, yeah, yeah, yeah, no, no, no. That's what me and my brother would do." Will said, "No." Tim said, "I hate Will." Will said, "I hate you." Sara said, "Will, you could say, Tim, I like looking at my puzzle so much that I don't want to break it until the last minute. You know what? If Will says that he wants to look at his puzzle because he is really proud of it, you can't force him to break it. You can't make him. You can say, I'm mad, I'm sad, please let me." Tim said, "I'm sad, I'm mad. Please let me." Will said, "No." Sue took Tim by the hand and walked with him over to the balcony. (Field Note 101097)

As Sara, the head teacher, tried to help Will and Tim negotiate a resolution to their conflict, Tim initiated real aggression when he kicked the puzzle and then threatened to bump the puzzle. Will did not respond to these acts of aggression, but when Tim initiated aggression by hitting Will, he responded with the verbal protest of no.

**Teacher interventions in real aggression.** Teachers intervened in 50% (n=65) of the 130 episodes of real aggression. Teachers frequently directed (n=46), asked questions (n=32), informed (n=28), stated classroom rules (n=28), and gained a child's attention (n=20) (see Table 18). Teachers were also likely to tell a child what to say (n=15), count (n=11), and provide positive reinforcement (n=10). In the example below, the teacher intervened in a conflict between Tim and Kevin. In the conflict, Tim grabbed a piece of puzzle out of Kevin's hand.

... Sara, the head teacher, said, "Tim, come here. Tim and Kevin, I need you to make a compromise." Tim said, "Sara, you know what? ... I started that puzzle and it was down right here and he grabbed it and he was holding it and I got it and he grabbed it." Sara said, "Tim, Tim." Kevin said, "Uh-huh, I sat it right in front of me and then I just picked it up and then you just grabbed it away." Tim said, "Uh-huh." Kevin said,
Table 18. The frequencies of teacher interventions in episodes of real aggression

<table>
<thead>
<tr>
<th>Teacher intervention</th>
<th>Real aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active listening</td>
<td>1</td>
</tr>
<tr>
<td>Apology</td>
<td>2</td>
</tr>
<tr>
<td>Consequence</td>
<td>8</td>
</tr>
<tr>
<td>Counting</td>
<td>11</td>
</tr>
<tr>
<td>Direction</td>
<td>46</td>
</tr>
<tr>
<td>Examine Injury</td>
<td>2</td>
</tr>
<tr>
<td>Explain</td>
<td>7</td>
</tr>
<tr>
<td>Feeling</td>
<td>3</td>
</tr>
<tr>
<td>Follow child</td>
<td>1</td>
</tr>
<tr>
<td>Gain attention</td>
<td>20</td>
</tr>
<tr>
<td>Give object back</td>
<td>2</td>
</tr>
<tr>
<td>Inform</td>
<td>28</td>
</tr>
<tr>
<td>Offer solution</td>
<td>6</td>
</tr>
<tr>
<td>Positive reinforcement</td>
<td>10</td>
</tr>
<tr>
<td>Question</td>
<td>32</td>
</tr>
<tr>
<td>Remove child</td>
<td>9</td>
</tr>
<tr>
<td>Remove object</td>
<td>2</td>
</tr>
<tr>
<td>Share experience or feeling</td>
<td>4</td>
</tr>
<tr>
<td>State a rule</td>
<td>28</td>
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<tr>
<td>Suggest an alternative</td>
<td>0</td>
</tr>
<tr>
<td>Sympathize</td>
<td>4</td>
</tr>
<tr>
<td>Teacher presence</td>
<td>2</td>
</tr>
<tr>
<td>Tell child what to say</td>
<td>15</td>
</tr>
</tbody>
</table>

"Huh-ha." Tim said, "Un-huh." Kevin said, "Huh-ha, Yes you did." Tim said, "No, I didn't." Kevin said, "Yes you did." Sara said, "Okay, stop. Kevin, look at me. Tim, look at me. Tim, that couldn't be you, stop. You know what you remind me of? My brother and I, that's what we used to do." Then Sara asked, "Kevin, are you mad?" Kevin said, "Yes." Sara asked, "Tim are you mad?" Tim said, "Yes." Sara said, "It's really hard to make a compromise when you're mad. When you're mad, you don't want to figure out what to do, you're just so mad at the other person." Kevin said, "I have an idea." Sara said, "Okay." Kevin said, "Maybe we should, next time, we should get a new puzzle like that and then we both can do the same." Sara said, "Hey, you're pretty amazing, pretty, pretty amazing. Kevin, great job! Really great job calming down. Tim are you sad? That happens sometimes. First you get mad and then you get sad. Kevin." Kevin asked, "What?" Sara said, "Would you be willing to ask Tim if he would do your idea next time and see what he says?" Kevin said, "Okay." Sara said, "You have lots of courage. Good job." Kevin said to Tim,
"Would you like to do my idea next time?" Tim did not respond. Sara said, "You know what might happen. He might be too sad to make a compromise right now." Sam said, "He's crying a little bit." Sara repeated, "He's crying a little bit. Kevin, any chance you can get him a glass of water? You can say, no thanks Sara, I don't want to. You don't have to. Any ideas? What can we do when Tim is too sad to make a compromise with you? Any ideas?" Then Sara asked, "Tim, any chance you can make a compromise right now? Are you too sad? Too mad? He's too sad and too mad to listen, Kevin. Okay are you guys doing different puzzles?" Kevin said, "I saw the puzzle and picked it up and you grabbed it." Tim said, "I got it." Sara said, "Tim, can you say I'm mad and I'm sad." Tim said, "I'm mad and I'm sad." Sara said, "This is a hard compromise, actually Kevin, maybe it's a long compromise, instead of a hard compromise. Sometimes it takes a long time." Kevin said, "Over lunch time and over nap time and..." Sara interrupted, "You know what you could say? Sometimes if one person isn't ready, then we wait, until that person is ready. What would you do in the mean time Kevin? Do you have another puzzle you are working on?" Kevin said, "Yeah, I'm helping Ted with this because, Tim just grabbed that piece of puzzle." Sara said, "So you went over and worked with somebody else? That's a good strategy, a really good strategy." Sara said to Kevin, "I want you to go finish working with Ted and I'm going to tell Tim that when he's ready to make a compromise to come back to me and I will get you. Don't start fighting with him in the mean time. Come get me if you get mad at him." Then Sara said to Tim, "Come here. When you're ready to make a compromise with Kevin, I want you to come say, 'Sara I'm ready to make a compromise'." Tim said, "Okay." Sara said, "No fighting with him in the mean time. If you get really mad at him, you need to come tell me." (Field Note 101097)

Sara, the head teacher, intervened by gaining Tim's attention and directing him to come to her. She also directed the boys to make a compromise and to stop arguing when they disagreed with each others' versions of the problem. After she shared a personal experience, Sara questioned how the boys were feeling and she explained to them that it was hard to make a compromise when you are angry. Sara provided Kevin with positive reinforcement for his idea of getting a new puzzle. Again, Sara questioned Tim about how he was feeling. Then, she directed Kevin to ask Tim to do his idea and provided Kevin with positive reinforcement for complying. Because Tim ignored Kevin's question, Sara decided that Tim was too sad to make a compromise. After Sam informed Sara that Tim was crying, Sara asked Kevin to get Tim a glass of water. She also asked how they could solve the problem if one person was too sad to make a compromise, but Tim ignored Sara's questions. Sara informed Kevin that Tim was too upset to make a compromise and asked Kevin if he was working on a puzzle separate
from Tim's. Sara directed Kevin to work on another puzzle until Tim was ready to make a compromise. She also provided Kevin with positive reinforcement for deciding to do a puzzle with someone other than Tim. Finally, Sara stated a rule by asking the boys not to fight, but to ask her for help if they became angry.

Although this episode consisted of a single initiation of aggression, several exchanges were made between Tim and Kevin to solve the problem. Sara, the head teacher, tried to help Kevin and Tim make a compromise. She talked to the children about their feelings. Tim stated negative emotions and was so upset, he could not negotiate a compromise with Kevin. Discussing the children's feelings and stating negative emotions were more common in episodes of real aggression than in episodes of pretend aggression. Sara often asked children to get a glass of water for peers who were crying. Getting a glass of water for the child was a tangible activity the children could do to feel like they were helping. I believe Sara used this technique to help children become more empathetic and increase their ability to take on the perspective of another.

When an adult intervened in an episode of real aggression the children were most likely to share information with the adult (n=48) and other children (n=53). The children also complied with the adults' directions (n=23). In the previous example, Tim and Kevin shared information with Sara, the head teacher, about their perspectives of the problem. Kevin also shared his idea about how to solve the problem by getting a new puzzle so they could do the puzzles at the same time. Kevin and Tim also shared information with each other about their perspectives of the problem, each stating that they had the puzzle first. Later, Kevin informed Sara that he was now working on a puzzle with Ted. Kevin complied with Sara's directions by asking Tim if he would like to do his idea of getting a new puzzle for the next time. Tim also complied with Sara's direction to say, "I'm mad. I'm sad." Finally, Kevin complied with Sara's direction to work on the puzzle with Ted.
In summary, teacher's intervened in half of the episodes of real aggression. They were most likely to provide children with directions or information, ask questions, and state rules. In this classroom, teachers intervened in episodes of real aggression by facilitating the negotiation of solutions to the children's problems, thus helping to stop the children's aggressive behaviors. As the previous example demonstrated, teachers intervened in possession disputes to help children make compromises by encouraging them to use their words. However, in this example, one child was too angry to negotiate, so the teacher chose to help the children separate by redirecting the children to different activities. Removing children from a conflict situation was also a successful strategy teachers used to stop real aggression.

**Termination of the real aggression.** An aggressive interaction between two people within an episode of real aggression was most likely to stop when an adult interrupted (n=43), when a child initiated a new act of aggression (n=36), when a child told an adult and the adult intervened (n=35), the aggressor stopped aggressing (n=25), or the target left (n=12). Children were just as likely to stay together (n=65) as they were to separate (n=65) in episodes of real aggression.

Aggression also stopped when children intervened (n=25) in episodes of the real aggression. When children intervened they were most likely to provide information (n=8), tell a teacher (n=7), ask a question(n=6), or state a rule (n=4). Although not frequently involved in the episodes of aggression, Carla, Nina, and Scott were more likely to intervene in their peer's episodes of aggression than the other children in the classroom. Similar to pretend aggression, they each had their own way of intervening. Scott was more likely to intervene when an adult was talking to the children about their behavior. He would support the teacher's intervention by suggesting alternatives to the children's current behavior.

Nina had a teacher's perspective on the children's problems in the class. Similar to the adults in the classroom, Nina believed that it was important for children to follow the
classroom rules. However, many of the children did not like Nina because she informed adults about their inappropriate behaviors. For example, Nina told Sara, the head teacher, about a behavior of Evan's that she considered inappropriate. Carla said, "Nina always tells." Scott said, "Yeah." Carla said, "I don't like it when Nina always tells" (Field Note 121297). Nina had developed the reputation of being a tattle-tell to the children. For example, in an argument between Nina and Amy, Nina said, "I'm going to tell Sara, if you don't agree." Amy said, "Tattle-tell." Nina said, "I'm telling that you called me a tattle-tell." Nina said, "Sara! Amy is calling me a tattle-tell" (Field Note 100197). Sara had a different perspective than the children of Nina's tattling behavior. In an interview, Sara said, "I do not think they're coming to me as tattling. I think they're coming to me as Nina saying that she doesn't know how to handle this" (Interview 121097). Nina was an only child and did not experience the sibling rivalry that was familiar to many of her peers. She needed the help of a teacher to resolve conflict.

In contrast to Nina, Carla had two brothers and was very experienced with sibling rivalry. Carla wanted everyone to get along. She understood how other children were feeling and did not tell the teacher about their inappropriate behaviors, but talked to them.

In the following example, Pete, Keith, Scott, and Will were having a contest to see who could build the tallest tower of blocks. Pete initiated instrumental aggression by trying to knock down his opponents tower by throwing a block at it.

Pete threw a block at Will and Scott's tower. Carla said, "Pete, you shouldn't throw these at it." Will yelled, "Stop!" Keith said, "Well, his is wrecked." Pete threw another block at their tower. Will yelled, "Pete stop it!" Pete said, "Well, you wrecked mine." Scott said, "I didn't, did I Pete." Pete said, "Will did." Will protested, "I don't wreck." Will and Scott accidentally broke their own tower. Pete said, "It went all down." Keith said, "Oh no theirs." Keith said, "They broke it themselves." Keith and Pete laughed. Carla asked, "Why are you laughing at them?" Pete said, "There's was so big, but now it's little." Carla said, "Well, maybe next time, I'm going to treat you like that." Will said, "Hey, I know. We can make it like this." Will and Scott built a new tower of blocks. (Field Note 111997)
Carla intervened in this episode by pointing out to the aggressors, Keith and Pete, that throwing blocks at their opponents’ tower and laughing at them may hurt their feelings. She was able to take on the perspective of the children in the classroom. She tried to make her peers understand how their behavior made her or other children feel.

**Summary of real aggression.** Real aggression frequently occurred on the blue carpet and at the tables when the children were playing with Legos and blocks. Evan, Amy, and Tim initiated real aggression by grabbing, taunting, name-calling, pushing, throwing, and pulling. Hitting was a common new initiation of aggression. Kevin, Will, Tim, and Ted were frequent targets of real aggression and they responded to real aggression by providing their peer with information, verbal protesting, directing, and pushing. In half of the episodes of real aggression, teachers intervened by gaining children’s attention and providing them with directions, information, rules, and questions. Children responded to teacher interventions by sharing information with adults and peers. Real aggression stopped when a teacher intervened and in 19% of the episodes a child intervened. Finally, the children were just as likely to stay together as they were to separate in the episodes of real aggression.

**The contrast between pretend and real aggression**

Pretend and real aggression occurred frequently on the blue carpet, the tables, and the playground. However, real aggression also occurred in other areas of the room including the balcony and the red carpet. Similarly, although pretend aggression was limited to specific materials in particular areas of the classroom, a variety of materials were used in episodes of real aggression.

The aggressive behaviors in this classroom were predominately displayed by boys, but only a small group of boys including Kevin, Tim, Will, Ted, and Sam consistently participated in both real and pretend aggression. Evan and Amy frequently initiated real aggression, but rarely initiated pretend aggression. Tim was the only child in the class who frequently initiated both real and pretend aggression. The girls in the class were less likely than the boys to
participate in episodes of pretend aggression or real aggression. However, when girls did participate, they were more likely to be aggressors or targets in episodes of real aggression than in episodes of pretend aggression.

The aggressors' behaviors. Aggressors frequently provided the target child with information. This was the most common nonaggressive behavior used by the aggressor in episodes of both real and pretend aggression. Other similarities or differences in the aggressors' behaviors in episodes of real aggression and episodes of pretend aggression can be identified by comparing the behaviors in Table 7 to the behaviors in Table 15. In episodes of real aggression and in episodes of pretend aggression, the aggressors used behaviors that included chasing, destroying property, grabbing, hitting, hitting objects, kicking, knocking, pulling, pushing, standing on a body part, throwing, threatening, tackling, walking into a person's body, waving, and wrestling.

However, the meaning children gave to these behaviors changed depending on whether the behavior was performed in an episode of real aggression or the context of make-believe play. For example, hitting a peer was a common theme in both real and pretend aggression, but in episodes of real aggression the hitting behavior was perceived as unwanted by the target child and in need of being stopped. In episodes of real aggression, the aggressor hit to physically hurt the target child; therefore, a teacher was more likely to intervene and the children to separate in episodes of real aggression than in episodes of pretend aggression when hitting was the aggression initiated. Below are examples of hitting used by the aggressor toward a target child. The first two examples were in the context of real aggression. In these examples, hitting was the single initiated act of the aggression.

In this episode, Evan and Jasmine were on the blue carpet. Evan picked up a big book that was laying on top of a shelf located next to the blue carpet.
Evan hit Jasmine with a big book four times. I said, "Evan." The head teacher, Sara, turned out the lights. Sara said, "Evan, that couldn't be you, that must be my imagination." (Field Note 102997)

In this scenario, two adults intervened to stop Evan's hitting behavior. I tried to gain Evan's attention by calling his name and Sara turned out the lights. She informed Evan that he would not hit Jasmine. This intervention was successful, because Evan returned the big book to the shelf. However, at the end of self-selection, Evan hit Jasmine again with a mop he had been using to clean the floor.

Evan was mopping the floor. Jasmine walked by him. Evan picked up his mop and hit Jasmine with it. Jasmine turned around and hit him with her hand. Evan returned to mopping the floor and Jasmine walked away. (Field Note 102997)

In contrast to the previous teacher intervention, in this example, Jasmine responded to Evan's hitting behavior with her own real aggression. She hit Evan with her hand. Evan responded to Jasmine's aggression by returning to mopping and Jasmine left the area. This episode illustrates that real aggression was one response children chose when they were the targets of real aggression. Furthermore, children were more likely to separate in episodes of real aggression than in episodes containing pretend aggression.

Children and adults in the classroom perceived hitting within the context of pretend as different from the hitting within incidents of real aggression. In episodes of pretend aggression, hitting was controlled to reduce the chances of children getting hurt. The target child saw the hitting as playing and having fun rather than an unwanted assault. In the next episode of pretend aggression, the children initiated six acts of bullying, but the children devised a system to control the amount of force they used against their opponents during a pretend boxing match.

Wade and Will were hitting their arms at each other from a distance pretending to fight. ...Will asked, "Can you do this Wade?" Will performed a karate maneuver. Will said, "Now we got to run." Will and Wade ran and then stopped near the door to the classroom. Will said, "We're fighting...Let's fight. Let's see what we can do." The boys swung their arms at each other and said, "Yah!, Yah!" Tim walked over to
where Will and Wade were fighting. Will said to Tim, "We're fighting." Both Will and Wade swung their arms. They said, "Yah! Yah!" Tim joined in the boxing match. Wade asked if Tim was on Will's team. Tim said, "Wade is on Will's team." Tim and Will hit each other. Then Will really punched Tim in the face. Tim punched Will in the face for real. Will cried. I told them to pretend. Then, Tim told Wade and Will to fight and they did. Tim said, "Time out." Wade and Will stopped hitting each other. Then Will and Tim fought. Tim said, "Time out." Tim and Will stopped hitting each other. (Field Note 120397)

At the beginning of this episode, Will and Wade hit their arms toward each other, but they did not actually have contact with each other's bodies. As the play escalated, the contact with each other's body increased. Will and Wade hit each other lightly on the arms and torso. When Tim joined the play, the amount of body contact increased and actual hits to the face occurred. The first hit appeared to be an accident by Will, but Tim responded with a forceful hit to Will's face causing him to cry. I intervened, directing them not to hit, but to pretend. If a classroom teacher had been present, I assume Will and Tim's hitting behavior would have been stopped. However, no teacher intervention occurred and the play fighting continued. Will and Tim returned to hitting each other with reduced force so that no one would get hurt. Tim directed Will and Wade to fight or hit each other. He also informed them when to take a "time out" or to stop fighting. When Tim and Will hit each other, Tim used "time out" as a strategy again to control the aggressive behavior.

Although hitting was the aggression used in the previous examples, the meaning children and teachers gave to the hitting behavior changed depending upon whether the behaviors occurred in an episode of real aggression or an episode of pretend aggression. Another behavior that was common in both episodes of real aggression and episodes of pretend aggression was throwing.

In the next episode, throwing was the single act of bullying initiated. Evan and Pete were outside on the playground by a large wire fence when Evan picked up rocks from the ground.
Evan threw rocks at Pete. Then, Pete held a handful of rocks up in the air as if he were going to throw them at Evan, but he did not. Pete said, "I was just trying to scare him away." (Field Note 102997)

Throwing was the aggression Evan chose in this example. Pete responded by threatening to throw rocks at Evan. Pete picked up the rocks and held them in the air. Pete informed the teacher that he was not planning to throw them, but that he wanted to scare Evan.

Like hitting, throwing also occurred in episodes of pretend aggression. In episodes of real aggression the children threw objects to hit a child. The aggressors goal was to hurt the target child. However, in episodes of pretend aggression, the object thrown often symbolized a bullet, a missile, or a bomb. The object may or may not have been thrown at a child. The aggressors goal was to contribute to the script rather than actually hurt a peer. In the next example, Will, Kevin, and Tim were using Lincoln logs as weapons.

Will threw a Lincoln log across the table. Kevin said, "Will, that's a bomb. Don't shoot that." Tim said, "That's a missile." Will said to Tim, "I want to shoot yours." (Video 120897)

In this example, Will initiated aggression by throwing a Lincoln log across the table. Kevin interpreted the throwing behavior as an act of pretend aggression. Kevin informed Will that the Lincoln log was a bomb and he directed Will not to shoot it. However, Tim informed Will that the Lincoln log was a missile. Will accepted Tim's idea that the Lincoln log was a missile and initiated a second act of aggression by threatening to shoot Tim's missile.

In another episode, Will, Ted, and Kevin were using cars to represent the good guys and the bad guys. Again, Kevin interpreted his throwing behavior in the context of pretend aggression. Will said, "He's the good guy." Ted asked, "He's a good guy?" Kevin said, "That's the bad guy." Kevin made a shooting noise and threw the car into the air (Field Note 091597). Similar to the previous episode, an object came to symbolize a concept in Kevin's imagination. According to Kevin, the matchbox car was a bad guy that he could shoot. He threw the car into the air as a symbol that the bad guy was shot.
These examples show that there are qualitative differences in how similar behaviors were perceived differently by the children and teachers. How the behaviors were perceived by the children and teachers depended upon the context in which the behaviors occurred and how the behavior was carried out by the aggressor. How the behaviors were perceived depended upon the meaning that the children and adults gave to the objects and the people's behaviors in the aggressive interaction.

In contrast, aggressors used behaviors including gossip, insult, intrude on privacy, name-call, stop play, taunt, tease, and write on that occurred during episodes of real aggression, but not in episodes of pretend aggression. Name-calling and taunting were aggressive behaviors used frequently by Evan. Evan was the child in the classroom who most frequently initiated real aggression, particularly bullying. He did not need to be provoked to call the children names. Below are examples of Evan’s behaviors. In the first example, Evan and Sam were at a table writing on worksheets.

Evan said, "Chicken." Sam walked over to Kate. He said, "Evan called me chicken." Kate, the student teacher, said, "No name-calling Evan. No name-calling Evan. That's one of our rules." Sam walked away. (Field Note 092697)

Evan initiated bullying by calling Sam a name. Sam responded to Evan’s real aggression by telling the teacher. Kate, the student teacher, stated the rule that name-calling was not allowed in the classroom. The children separated as Sam left the table.

The following episode demonstrated threatening and taunting. Evan, Kevin, Will and Tim were on the red carpet putting together a track made of waffle blocks. A new substitute teacher was in the classroom. The children noticed the novelty of the substitute teacher's weight. She was a rather large woman, unlike the other teachers the children were familiar with in the class. Although it was common for the children in the classroom to taunt each other, this was the only day I heard the word fat used for an aggressive purpose.

Evan, Kevin, Will, and Tim were putting together the waffle block tracks. They had built a fairly elaborate track with tunnels. Kevin said, "This is our house. I made that
In this episode, instrumental aggression was used in a conflict over the possession of a waffle block house. Tim wanted to use the house that Kevin and Will built out of the waffle blocks. Tim informed Kevin that he needed to share the house, but Kevin refused. When Tim initiated aggression by threatening to break the house, Kevin responded by informing Tim of what the consequences would be if he broke the house and then, threatened to hit him. Tim responded by excluding Kevin from a part of the waffle block track. Then, Tim initiated a new aggressive interaction by insulting Will, who had helped to build the house. Kevin defended Will by verbally protesting and insulting Tim's car. Evan also initiated a new act of aggression when he insulted Tim. Finally, Kevin initiated the last aggressive interaction by repeating Evan's insult. Tim responded by threatening to hit Kevin. Tim's threat was successful, because Kevin gave the car to Tim.

In episodes of pretend aggression, but not in episodes of real aggression the aggressors used their words and actions to act out behaviors that included blow up, catch, charge, cut, eat, hit stick, karate, point stick, shoot, sting, swing arms, and tackle. Two scenarios are presented in the following paragraphs to demonstrate how the children in episodes of pretend aggression used these behaviors.

In the first example, Ted and Sam were at a round table creating airplanes with plastic geometric pieces that connected together. In this episode, Sam initiated the single act of aggression by pretending to drop a bomb on Ted's airplane.

Ted was flying an airplane he created. Sam said, "I'll kill you. Bombs away!" Ted said, "Boom! I blew up the bomb!" Ted dropped a plastic piece he had in his hand
and then flew his plane over the table imitating the sound of an airplane. Sam held a piece of plastic up and shot at the plane. He said, "Bang, bang, bang, bang!" Ted flew the plane back toward the tabletop. Sam said, "Boing!" as he hit the plane three times with a piece of plastic. (Field Note 102097)

In this episode, Sam threatened that he would kill Ted by blowing him up with a bomb. After Sam informed Ted that he dropped a bomb, Ted countered Sam's attack by blowing up the bomb with a bomb he created. Ted simulated the dropping of the bomb by dropping a plastic geometric shape. Ted continued to fly his plane making onomatopoeia sounds. Sam attacked Ted's plane again by pointing a plastic piece and imitating the sounds of shooting. Ted ignored Sam and continued to fly the plane back to the surface of the table. Sam attacked, hitting an object or the plane with a geometric piece of plastic and creating sounds to imitate the explosion of a bomb.

Finally, shooting and eating were also acts of aggression used by aggressors toward imaginary characters in episodes of pretend aggression. In this bullying episode, Kevin, Tim, and Evan were playing good guys and bad guys on the blue carpet with the blocks and the matchbox cars.

Kevin said, "Help us! Let's go to our hide out, so the bad guys can't see us. They're almost here. Let's hide quickly, quickly hide." Tim said in a deep voice, "Oh no! They're coming for me." Kevin said, "Oh, no! The bad guys almost here." Evan said, "We are the bad guys." Using his deep voice again, Tim said, "Listen now. Eat us now. Eat the bad guys." Tim said, "How about he's not a bad guy, only one bad guy was coming." Then in a deep voice he said, "The bad guys are coming, the bad guys are coming." Evan said, "We are the bad guys." Tim said, "No, we are good guys." Kevin said, "I'm making the hide out." Evan and Tim were shooting with their cars. Tim said, "Say another bad guys coming and he hide." Evan said, "Here's a nice house." Tim said, as he shot at Evan, "I'm coming to blast you. Eat the bad guy now, eat the bad guy." Kevin asked, "Where's the bad guy?" Tim said, "Here you go. Let's say you keep eating him okay? Kevin!" Kevin said, "I'm coming to eat you." Tim asked, "But he's not going to eat the good guys right?" Kevin said, "Yeah, he just likes you. He brings you inside the house. I will be inside the house." Tim said, "I will bring this too." (Field Note 091097)

Evan and Tim initiated aggression by shooting imaginary characters using matchbox cars as guns. After Tim informed Evan that another bad guy was coming, he initiated a
second act of aggression by shooting Evan. Then, Tim directed Kevin to eat the bad guy. Kevin responded by complying with Tim’s direction agreeing to eat only the bad guys.

The targets' behaviors. How the target responded to aggression depended upon whether the aggression occurred within the context of reality or the enchanted world of make-believe. In episodes of real aggression, children were most likely to say, “I’m telling” (n=36), provide a peer with information (n=34), or pull back on an object (n=32). In episodes of pretend aggression, children frequently provided information (n=79) in response to a peer’s aggressive behaviors. However, the children in episodes of pretend aggression were less likely to tell a teacher about the aggressive actions of a peer than the children in episodes of real aggression.

Other behaviors including blast/blow up, climb, comply, charge, hit stick, jump, mine, observe, reach, roll/crawl, run, point stick, karate, shoot, shoot back, and swing arms were responses to pretend aggression, but were never responses to real aggression. Hitting sticks together occurred during make-believe sword fights. A sword fight could transpire whenever two children held long narrow sticks. In the following episode, Keith and Ted obtained two long cylinders of cardboard from a box located on a table. Keith and Ted each took one of the cardboard cylinders and used it as a sword.

Keith picked up a white flat thin piece of cardboard. Ted also picked up a piece of cardboard. Ted waved his cardboard over Keith. He rubbed the edge of the cardboard on Keith's cardboard. Ted put his cardboard stick up in the air and then brought it down. After Keith moved his cardboard, Ted moved his cardboard and then bent it. Keith got up and walked over to Ted. He pointed the cardboard stick at Ted. Ted raised his piece of cardboard. Keith hit his cardboard on Ted's cardboard stick and walked away. Ted followed and hit his cardboard on Keith's head. Keith held up his cardboard like a sword. Ted charged toward Keith with his cardboard sword. Ted said, "Yah!" Ted bent his cardboard in half. He said, "Woah! My sword bent." Then he reached out toward Keith. Keith hit Ted's cardboard. Then Ted hit Keith's cardboard. Keith charged at Ted with his cardboard sword. Ted charged back at Keith and hit him on the bottom with his cardboard sword. Keith used his cardboard sword to hit Ted in the stomach. Ted laughed as he grabbed onto the Keith's sword and pulled him in a circle. Then, Ted chased Keith with the cardboard
sword until a student participant told them they could not use the cardboard pieces as swords. Ted and Keith put the cardboard back in the cardboard box. (Field Note 120897)

Hitting a child's stick was the initial aggression Keith used in this scenario. Ted, the target of aggression, responded first by using his cardboard sword to hit Keith on the head. As Keith held up his sword, Ted charged toward him with his sword. After Keith and Ted took turns charging at each other with their swords, Ted used his sword to hit Keith’s bottom. Keith retaliated by hitting Ted in the stomach. Laughing, Ted grabbed Keith's sword and pulled him in a circle. When Ted chased Keith with the sword, a student participant intervened informing Ted and Keith that the cardboard pieces could not be used as swords. Ted and Keith complied by putting the cardboard pieces away.

Responses to aggressive behaviors in episodes of real aggression that were not found to be responses to pretend aggression included agreeing, following, giving an object, gossiping, insulting, leaving, name-calling, stating negative emotions, offering a solution, stating a rule, tackling, taunting, waving, and writing on a peer. In the next example, Carla, Nina, and Lynn responded to Evan’s aggression by gossiping about his behavior. The girls were on the playground having a discussion when Evan ran by with a kite. Evan returned to where they were standing and for no apparent reason, he stooped down, picked up a hand full of rocks, and threw them at Carla, Nina, and Lynn.

Evan threw rocks at Carla, Nina, and Lynn. Evan flew a kite as he ran away from the girls. Lynn said, “Evan is worse then a big brother.” Evan ran back and threw rocks and dirt at the three girls. The substitute teacher told Evan that if he did it again, he would need to go sit on a chair. Evan threw rocks again. The substitute teacher took Evan inside to a chair. Nina and Lynn talked about Evan’s rock throwing and how the teacher had to tell him to sit on a chair. Nina said, “He threw rocks, let’s go tell Eve” (Field Note 111997).

Throwing rocks was the aggression Evan used in this episode. After he threw the rocks, Evan ran away and the girls responded by talking or gossiping about Evan’s behavior. Evan ran to the girls and threw a rock again. A substitute teacher intervened by informing
Evan of what the consequence would be if he chose to continue throwing rocks. When Evan threw rocks for a third time, the teacher intervened by removing Evan from the playground. The girls gossiped to Eve about Evan's rock throwing behavior.

**Teacher interventions.** Teachers intervened in 50% of the 130 episodes of real aggression and 42% of the 79 episodes of pretend aggression. In episodes of real and pretend aggression (n=real, pretend), teachers frequently directed (n=46, 19), asked questions (n=32, 10), informed (n=28, 6), gained attention (n=20, 10) and stated classroom rules (n=28, 18). In episodes of real aggression, teachers were also likely to tell a child what to say (n=15), count (n=11), and provide positive reinforcement (n=10). Teacher interventions including apologizing, counting, feeling, giving objects back, offering solutions, removing objects, sharing experiences, sympathizing, and merely being present occurred in episodes of real aggression, but did not occur in episodes of pretend aggression. Teachers were also more likely to remove a child during an episode of aggression (n=9) than in an episode of pretend aggression (n=2). Suggesting an alternative was the only teacher intervention in episodes of pretend aggression that was not found in episodes of real aggression.

When an adult intervened in an episode of both real and pretend aggression the children were most likely to share information with the adult (n=48, 13) and other children (n=53, 14). The children also complied with the adults directions (n=23, 18). However, the children were more likely to ask questions (n=11), verbally protest (n=11), and leave the area (n=9) in episodes of real aggression than in episodes of pretend aggression.

**Termination of the aggression.** An aggressive interaction between two people within an episode of real aggression was most likely to stop when an adult interrupted (n=43), when a child initiated a new act of aggression (n=36), when a child told an adult and the adult intervened (n=35), the aggressor stopped aggressing (n=25), or the target left (n=12). An interaction of pretend aggression was most likely to end because the target was not human and therefore could not respond (n=78). When the target was human in episodes of pretend
aggression, the aggression stopped when a child initiated a new act of aggression (n=53), an adult intervened (n=23), the interaction was interrupted by a third person (n=16), or the aggressor stopped aggressing (n=16). In episodes of pretend aggression, the target was less likely than in episodes of real aggression to leave the area or tell the teacher about the aggressive actions of a peer.

Children intervened in 19% (n=25) of the real aggression episodes and 16% (n=13) of the pretend aggression episodes. When children intervened in episodes of real and pretend aggression they were most likely to provide information, tell a teacher, ask a question, or state a rule. Although not frequently involved in the episodes of aggression, Carla, Nina, and Scott were more likely to intervene in their peer’s episodes of aggression than the other children in the classroom.

Finally, children were just as likely to stay together (n=65) as they were to separate (n=65) in episodes of real aggression. However, in episodes of pretend aggression, the children were more likely to stay together (n=63) than they were to separate (n=7).

Summary. A small group of boys participated consistently in episodes of both real and pretend aggression. Although aggressor’s used similar behaviors in real and pretend aggression, the meaning and the perceptions of the behaviors changed depending upon if the behavior occurred in the context of reality or the world of make-believe. In episodes of real aggression and in episodes of pretend aggression, target children frequently provided information in response to a peers aggressive behaviors. However, other behaviors of the aggressor and target were confined to either episodes of real aggression or episodes of pretend aggression.

In addition, teachers intervened in more episodes of real aggression than episodes of pretend aggression. Teachers intervened by directing, questioning, gaining attention, and stating rules. Several teacher behaviors in real aggression were not in pretend aggression, but only the strategy of suggesting an alternative was exclusive to pretend aggression. In
episodes of real aggression and in episodes of pretend aggression, children responded to
teacher interventions by sharing information with the teachers and the children and/or
complying with teacher directions.

In episodes of real aggression, children's aggression stopped when an adult interrupted
the interaction. In contrast, in episodes of pretend aggression, the aggression was most likely
to stop because the target was an imaginary character. When children were the targets of the
aggressors' actions, the interaction was most likely to terminate when a new act of aggression
was initiated. Finally, the children were more likely to stay together in episodes of pretend
aggression than in episodes of real aggression.
CHAPTER 5. DISCUSSION

The purpose of this study was to describe the real and pretend aggression exhibited by children in a full-day kindergarten. The main objective was to discover the sequence of aggressive episodes and how children executed aggressive acts within the real and pretend aggression that naturally occurred during the course of free play. In addition, teacher behaviors were examined to determine how teachers intervened when aggression occurred within the context of reality or the world of make-believe.

According to sociopolitical theorists, children use play to develop social and political concepts and values about the world (Carlsson-Paige & Levin, 1987, 1988). Sociopolitical theorists suggest that adults should discourage children from play that involves pretend aggression because it contributes to real aggression by teaching that violence is an acceptable way to interact with other people, solve problems, and display power. Social learning, cognitive neoassociation, and social cognitive theories support this argument by suggesting that observing and participating in aggression, even fantasy aggression, increases the likelihood that children will behave aggressively (Bandura, 1973; Berkowitz, 1984; Huesmann, 1988; Huesmann & Eron, 1984, 1989). However, proponents of cathartic theory suggest that participating in pretend aggression should decrease children's tendency to behave aggressively in the future (Dollard et al., 1939; Feshbach, 1956). Because this study was descriptive, no predictions can be made as to whether participating in pretend aggression increases or decreases children's tendencies to display real aggression in the future. Nevertheless, this study clearly shows that boys who frequently participated in pretend aggression also participated in real aggression. However, only one of the five boys frequently initiated the acts of real aggression. Furthermore, two of the three children who frequently initiated real aggression rarely participated in pretend aggression. It is also interesting to note that boys who frequently participated in pretend aggression played together and were frequent targets of both pretend and real aggression. These boys may have been frequent targets of
real aggression because one of the boys who frequently initiated real aggression was a member of this playgroup.

In addition, this study supports Bandura's (1973) belief that frustration and anger are not necessary for aggression to occur. Anger or distress accompanied very little real or pretend aggression. Reactive aggression was identified in only 1% of the pretend aggression episodes and 10% of real aggression episodes. The majority of aggression displayed in this study was bullying.

This study also supports Bandura's (1973) social learning theory. According to Bandura, children can learn to behave aggressively by observing people in their everyday lives or on television committing aggressive acts and then storing these acts into their memories. The boys who frequently participated in both pretend and real aggression often developed superhero story lines based on violent cartoons. Several episodes of pretend aggression were connected to violent cartoons including Batman, Power Rangers, Beetleborgs, and Superfriends. In interviews with the children, three of these five boys said their favorite television show was a superhero program. The boys who watched these cartoons used kicking, hitting, and karate maneuvers to imitate the television characters who modeled these aggressive behaviors. These boys could easily retrieve the aggressive strategies from their memory and were more likely to use them than children who did not mention a superhero cartoon as one of their favorite television shows.

In addition, this study provides some evidence that attitudes of parents toward television and aggression influence children's participation in pretend aggression. For example, Kevin, who participated in over half of the episodes of pretend aggression, had parents who permitted him to watch violent cartoons. In contrast, Scott was not allowed to watch violent television programs and participated in only 14% of the pretend aggression episodes. However, the children who did not watch Power Rangers and Beetleborgs learned about these cartoons by talking to their peers and observing their behaviors. Kevin's mother
commented that even when she restricted him from watching Power Rangers in the past, he learned about the aggressive behaviors of the characters from friends. Scott also participated in episodes of pretend aggression despite his limited exposure to violent cartoons.

The analysis and interpretation of the data collected in this study support previous research. Similar to findings reported in earlier studies (Farver, 1996; Huesmann et. al., 1994; Kupersmidt et. al., 1995; Sanson & DiMuccio, 1993; Watson & Peng, 1992; Wegener-Spohring, 1989; William & Schaller, 1993), the boys in this study participated more frequently in real and pretend aggression than girls. However, in this study, only a small group of boys frequently participated in both real and pretend aggression. Farver also found that a small number of children were involved in the majority of aggressive episodes in her study. In addition, this study supports previous findings (Frey & Hoppe-Graff, 1994; Goff, 1995) that bullying is the predominant type of aggression used by middle-class boys.

Furthermore, similar to previous studies (Carlsson-Paige & Levin, 1987; Haas Dyson, 1994; Jordan & Cowan, 1995; Paley, 1984; Sutton-Smith, 1988; Wegener-Spohring, 1989), boys in this classroom were more likely than girls to participate in superhero and war play themes. In this study, many of the children's ideas for pretend aggression came from war cartoons including Batman and Robin, Superman, Super Friends, Power Rangers, and Beetleborgs. Several other researchers also found that children's ideas for war play come from television (Carlsson-Paige & Levin, 1987, 1988; Dodd et al., 1992; Gronlund, 1982; Kostelnik et al., 1986, Ritchie & Johnson, 1982). The children, in this study, who reported watching violent cartoons and playing with violent toys in individual interviews frequently participated in both real and pretend aggression. This provides some support to Goff's (1995) finding that children who prefer violent toys exhibit more real and pretend aggression than those who prefer nonviolent toys.

In addition, imaginary characters were the most frequent targets of children's pretend aggression in this study. Similarly, Frey and Hoppe-Graff (1994) also found that playful
aggression was often not acted out against a person. Aggressive superhero characters were present in Will, Kevin, and Tim's conversations, drawings, writings, dramatic play, and constructions. Levin and Carlsson-Paige (1995) also reported that early childhood teachers observed children expressing the aggression in war cartoons in their social interactions, art work, story writing, and free play activities.

Although the head teacher, Sara, banned war play, the children continued to participate in pretend aggression. Several other teachers also reported the continued existence of war and weapons play, even when war play was banned in their early childhood classrooms (Carlsson-Paige & Levin, 1987).

This study contributes new information to the literature by comparing real aggression to pretend aggression with the focus on the sequential aspects of the aggressive episodes and the details of the execution of the aggressive act. The process of the children's interactions in pretend aggression has not been addressed in the literature (Frey & Hoppe-Graff, 1994) and few studies have examined the sequence of real aggression (Coie et al., 1991). In this study, the majority of real aggression episodes consisted of a single initiation of aggression, whereas, new initiations of aggression occurred in over half of the episodes of pretend aggression. In episodes of pretend aggression, the aggressor was most likely to shoot, threaten, hit, or blow up a person, object, or imaginary character. In contrast, the aggressor was most likely to grab, taunt, name-call, push, or throw an object at a child in episodes of real aggression. In both types of aggressive episodes, the target frequently provided the aggressor with information, but the target was also likely to tell the teacher in episodes of real aggression. Finally, children were more likely to stay together than to separate after an episode of pretend aggression, but they were just as likely to separate as they were to stay together in episodes of real aggression.

Previous researchers (Goff, 1995; Watson & Peng, 1992; Wegener-Spohring, 1989) who examined the relationship between real and pretend aggression observed children during
indoor free play. In this study, the children were observed in the classroom and out on the playground. The children’s pretend aggression outdoors included more rough-and-tumble play than the pretend aggression that was observed in the classroom. Also fewer words were used to represent ideas and actions on the playground than inside the classroom.

Furthermore, several researchers (Connor, 1991; Goff; Watson & Peng) manipulated the types of toys available for the children during play. In this study, the toys in the classroom were chosen by the teaching staff to reflect their curriculum not to support the agenda of the research. Therefore, this study identified the areas in the classroom where children naturally participated in pretend and real aggression and the materials children chose to facilitate their aggressive acts.

Finally, this study makes a contribution to the literature by providing a detailed description of the teachers’ behaviors in pretend and real aggression. Teachers intervened in more episodes of real aggression than in episodes of pretend aggression. In both pretend and real aggression, the teachers goal was to stop the children’s aggressive behaviors. Teachers intervened by gaining children’s attention, providing directions, asking questions, and stating rules. In episodes of real aggression, teachers intervened to help children negotiate solutions to their problems. In contrast, teachers intervened in pretend aggression by enforcing rules and suggesting alternative activities that the teachers believed were more appropriate for the children.

**Implications for Practice**

Before teachers try to change the behaviors of children who participate in episodes of aggression, they need to think about the purpose for their intervention. Is the behavior real aggression or is it pretend aggression? Observation of the children’s behaviors is the key to identifying the type of aggression that is displayed. Because this study provides a detailed description of the behaviors used in aggression, it may help teachers and researchers to distinguish between real and pretend aggression. The teachers in this study intervened to
decrease aggressive behaviors or to redirect the focus of children's play. When teachers intervene in episodes of pretend aggression, they need to consider that most targets of pretend aggression are imaginary characters and that boys who frequently initiate pretend aggression do not necessarily initiate frequent acts of real aggression. As the head teacher in this study explained, by observing children and talking to them about their play, teachers can determine where ideas for pretend aggression originate and what it means to them.

Bandura (1973) suggests that aggressive behaviors can be eliminated if the social conditions and positive reinforcements that maintain behavior are removed. Teachers can encourage parents concerned about the amount of pretend and real aggression their children participate in to limit the violent television programs they allow their children to watch.

In addition, because only a small group of boys consistently participated in both real and pretend aggression, teachers may want to use interventions that focus on specific peer groups rather than individual children. Farver (1996) suggests teachers can intervene by helping to restructure young children's peer groups. Reorganizing peer groups may provide children with aggressive behaviors a chance to participate with peers who can model positive techniques for solving problems and appropriate ways of displaying emotions in conflict. Participating with a different group of children may also foster variety in the play of children who appear to be obsessed with acting out pretend aggression.

Teachers can also use social problem solving to reduce aggressive behaviors (Pepler & Slaby, 1994). Researchers have found that teaching conflict resolution strategies leads to more social competence and less aggression in the classroom (Benton-Murray, 1994; DeMasters & King, 1994). Teachers can improve children's problem solving skills by helping them to think of alternative possibilities and consider the consequences of their action (Spivack & Shure, 1974). In this study, the head teacher intervened in episodes of real aggression by helping children negotiation solutions to problems during interpersonal conflicts.
Boyd (1997) suggested that teachers intervene in pretend aggression out of concern for children’s safety. The head teacher in this study also mentioned safety as a reason for banning war play in the kindergarten classroom. However, banning did not eliminate the children’s desire to participate in war play. According to Jordan and Cowan (1995), when war play is banned, it goes underground. Children continue to participate in war play, but they try to conceal their activities from the teacher. Boyd (1997) suggested that banning war play denies teachers the “opportunity to teach about values, respect, safety, and living in a democratic social group” (p. 23).

Teachers can reduce aggressive behaviors by changing children’s aggressive scripts and normative beliefs about aggression (Huesmann, 1988; Huesmann & Eron, 1984, 1989). Teachers can help to change children’s scripts and beliefs about aggression by actively facilitating war play rather than banning it. Through this approach teachers allow war play into the classroom when the children initiate it. They observe what children are working on and actively intervene by expanding on what the children are doing and saying (Carlsson-Paige & Levin, 1988). This allows teachers to help children become more constructive rather than imitative in their play, as well as influences their political ideas (Carlsson-Paige & Levin, 1987). Helping to facilitate war play may decrease aggression, influence children’s values, and foster children’s ability to think of alternatives for solving conflicts both in play and in the world (Carlsson-Paige & Levin, 1987, 1988, 1990; Fortis-Diaz, 1997; Gronlund, 1992).

**Implications for Future Research**

This study examined the sequence of aggression and the behaviors of middle-class children in a kindergarten classroom located on a university campus. Future research is needed to discover what behaviors are used by children from other socioeconomic groups or in other settings. Frey and Hoppe-Graff (1994) found that differences in behavior do exist based on socioeconomic status. Research with younger children is also needed to determine when pretend aggression begins to develop.
Similar to Costabile et al., (1992) this study found some evidence to support the theory that parental beliefs about aggression influence children's behaviors. Other qualitative studies are needed to explore children's perceptions and parental beliefs regarding pretend and real aggression. Costabile et al. suggests that future studies are needed to clarify the relationship between parental attitudes and children's behaviors using observations rather than parental reports of children's behavior.

Research is also needed to investigate how children perceive teacher interventions in episodes of pretend aggression and in episodes of real aggression. Do children perceive the interventions as helpful or intrusive? Future investigators may also choose to explore how the children not involved in the aggressive episodes perceive the children's and teachers' behaviors. Finally, future studies need to be conducted in classrooms that support rather than ban children's war play.

**Limitations**

The setting of this study was a kindergarten classroom located on a university campus. Frey and Hoppe-Graff (1994) found that differences in playful aggression existed between middle-class boys attending a university preschool and boys attending a preschool in the slums of Brazil. Therefore, it is possible that different behaviors would be observed in other environments or with another population of children. For example, if children with behavioral disorders or highly aggressive behaviors were included in the sample, the behaviors and/or the frequency of the behaviors observed may be different.

In addition, the children in this study attended an early childhood program that banned war play. If the children were to participate in a classroom that allowed weapon play their behaviors may change. It is also possible that the individual children in this study would exhibit different behaviors if they were placed in a different group of children. Goff (1995) found that the composition of the play groups influenced the behaviors of individual children.
Furthermore, relational aggression, the harming of peer relationships, was excluded from the analysis of aggression. If relational aggression had been included in the analysis, it is likely that girls would have participated in more episodes of real aggression. Crick and Grotpeter (1995) found girls to have a higher rate of relational aggression than boys.

Finally, every effort was made to capture as much of the environment as possible, but the analysis was limited to what the lens of the camera captured and what was recorded in the field notes. Because not every aggressive episode was documented, the aggressive behaviors of the children may have been over or under estimated.

**Conclusion**

This study reveals the complexity of children's interactions and the behaviors used in episodes of pretend and real aggression. The children's and teachers' behaviors and their reactions to behaviors changed depending on whether the aggression occurred in the context of reality or in the world of make-believe. The examples also illustrated the behaviors that were exclusive to real aggression and the behaviors that were exclusive to pretend aggression.

When the children participated in aggression, teacher interventions helped children resolve the situation. In pretend aggression, teachers intervened to redirect children's behaviors to activities acceptable to the teachers. In contrast, teachers intervened in real aggression to help children resolve conflict and negotiate solutions. Teachers should carefully observe children's behaviors and consider their purpose for intervening before they decide what action to take in the aggressive interactions of children.
APPENDIX A. VIDEOTAPE SCHEDULE
## VIDEOTAPING SCHEDULE

The classroom will be videotaped on the dates that are circled.

### Full-Day Kindergarten

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### Notes
- **XX** indicates no school.
- Days marked with an * are HALF DAYS (Dismissal at 11:45 a.m.)
APPENDIX B. INTERVIEW QUESTIONS
Comprehensive Ethnography of a Kindergarten Program

Teacher Interview Questions

Fall

1. Describe a typical day in kindergarten.

2. What activities are available during self-selection? What activities are common in the dramatic play area? What are the activities the children participate in on the playground?

3. How are the self-selection activities chosen? Are there activities that emerge from the children themselves, that they initiate, rather than using the materials in the way that they were planned?

4. What are the rules that the children are asked to follow during self-selection? What are the rules for outside? How do the children know what the rules are? How are the rules enforced both outside and during self-selection?

5. I have heard you and the other teachers use the word respect in the classroom. What does the word respect mean in the kindergarten classroom?

6. Are there any activities or areas inside or outside where the children play rough and tumble activities?

7. Do the children initiate aggressive play themes? What are some examples?

8. Describe the children who participate in the play with aggressive themes.

9. When the children are role playing, are there situations where a child takes on a good guy role and another child takes on a bad guy role? Where do you think ideas for good and bad come from and the aggressive play themes?

10. How do you and your teaching staff support or discourage aggressive play?

11. Do the kindergarten children frequently participate in war play? What is your philosophy about war play in the classroom? What is the administrations philosophy on war play?

12. What do the children do when they are told that there are no guns in school? Do the children ever make a gun, but then tell the teacher that it is something else?
Comprehensive Ethnography of a Kindergarten Program

Teacher Interview Questions

Winter

1. What is your philosophy of early childhood education?

2. Can you tell us about specific children? Any of the ones you want to tell us first?

3. Can you explain Evan's behavior? Have Evan's parents provided any explanation for Evan's behavior? Do you have any speculations? What strategies do the teachers use in the classroom to address Evan's disruptive behavior?

4. Pete often brings different activities from home to work on during self-selection. What is your perspective on the activities he brings into the classroom? Why do you think he would choose these activities? Have the children made any comments in regard to the activities? Have you noticed if Pete is involved in any typically feminine activities or behaviors in the classroom, other than those that are brought in from home?

5. Have you notice any change in Amy's behaviors since the beginning of kindergarten? Lately it seems that Amy, Kathy, and Evan have become pretty good friends. Do you have any insights as to why Amy would get along well with Evan and Kathy?

6. Which children do you see participating in war play in the classroom? Why do you think Amy has lost interest in war play? Do you see a change in regards to Amy's relationship with Ted?

7. What do you know about Ted's imagination? And about Ted's use of nonsense words and songs?

8. Have you noticed any friendships developing?

9. Who do you see as the most popular child in the classroom? Who do you see as most popular among girls? Who do you see as most popular among boys? Who is the least popular child in the classroom? Who is the least popular of the girls? Who is the least popular of the boys? For each question, why?
A Comprehensive Ethnography of a Kindergarten Program

Teacher Interview Questions

Spring

1. How has your philosophy of early childhood education changed over the year?

2. What progress have Pete and Evan made over the year? Have they met your goals for them? If so, in what ways? If not, why not?

3. What have you noticed about Jasmine's behavior? How do you explain Jasmine's clinging to teachers? What is the relationship between Jasmine and Ted? What is Jasmine's role in the classroom?

4. How do the children make compromises? With your help? Without your help? How has this changed over the year?

5. What friendships have you seen develop and maintained over the year?

6. Who do you see as the most popular child in the classroom? Who do you see as the most popular girl? Who do you see as the most popular boy? Who is the least popular child in the classroom? Who is the least popular girl? Who is the least popular boy? Why?

7. Are the children prepared for first grade? In what ways? What is each child's strengths academically and socially?

8. What is the role of the student participants in your classroom? Student teachers? How is their presence related to the children's behaviors? How do participants interact with the children? What is the effect of participants on the children and the classroom as a whole?
A Comprehensive Ethnography of a Kindergarten Program

Teacher Assistant Interview Questions

1. What is your philosophy of early childhood education?

2. Tell us about the children in your class. Any of them in particular that you would like to talk about?

3. What is your interpretation of Evan's behavior? Have Evan's parents provided any explanation for his behavior? What strategies do you use in the classroom to address Evan's behavior?

4. What is your interpretation of Pete's behavior? Have Pete's parents provided any explanation for his behavior? What procedures do you use in the classroom to address Pete's behavior?

5. What role does Eve play in the classroom? How has her role changed over time? What do you think about Eve and Jill's relationship?

6. What do you think about Jill and Karen's relationship?

7. What do you think about Tim and Will's relationship? Why do you think Tim is so aggressive with Will?

8. What do you know about Ted's imagination? What do you know about Ted's use of nonsense words and songs?

9. What are your impressions of Scott? Describe Scott.

10. Who do you see as the most popular child in the classroom? Who do you see as the most popular girl? Who do you see as the most popular boy? Who is the least popular child in the classroom? Who is the least popular girl? Who is the least popular boy? Why?
A Comprehensive Ethnography of a Kindergarten Program

Family Interview Questions

1. Describe your child.

2. Who are his/her friends in school? Outside of school?

3. What is his/her favorite activities in school? Outside of school?

4. What did he/she learn in kindergarten this year? What does he/she talk about most often in relation to kindergarten?

5. How did kindergarten teachers meet your expectations? What are your impressions about the kindergarten curriculum?

6. What are your expectations for first grade? Is he/she ready for first grade? What are his/her fears/concerns about first grade?
A Comprehensive Ethnography of a Kindergarten

Child Interview Questions

1. What toys do you play with at home? What are your favorite toys?

2. Does your family allow you to watch television? If yes, what television programs do you watch? What is your favorite television show?

3. Does your family have rules about toys? If yes, what are the rules?

4. Does your family have any rules about television? If yes, what are the rules?

5. Children are asked to sort pictures of their classmates into three boxes. The first box is for children they like to play with all the time. The second box is for children that they like to play with only sometimes and the third box is for children that they do not like to play with. For each box, the children were asked why do you like to play with the children in the first box, why do you only sometimes like to play with the children in the second box, and why do you not like to play with the children in the third box?
APPENDIX C. CATEGORY DEFINITIONS
Table 1. Definitions of aggressive categories found only in episodes of pretend aggression

<table>
<thead>
<tr>
<th>Aggression</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blow up</td>
<td>To make an imaginary object explode (e.g., bombs).</td>
</tr>
<tr>
<td>Catch</td>
<td>To run after and touch or put arms around peer.</td>
</tr>
<tr>
<td>Charge</td>
<td>Moving quickly toward a peer or object representing an imaginary character and hitting it with force (e.g., quickly moving a dinosaur toward another dinosaur so that they hit head on with great force).</td>
</tr>
<tr>
<td>Cut</td>
<td>Use sharp object to slice object (e.g. knife, scissors).</td>
</tr>
<tr>
<td>Eat</td>
<td>Pretending to bite peer, object, or imaginary character.</td>
</tr>
<tr>
<td>Hit stick</td>
<td>Using a stick to hit another stick.</td>
</tr>
<tr>
<td>Karate</td>
<td>Controlled kicks and choppy hand movements.</td>
</tr>
<tr>
<td>Point stick</td>
<td>Point a stick at a peer.</td>
</tr>
<tr>
<td>Shoot</td>
<td>Pretending to fire a gun, laser, or missile.</td>
</tr>
<tr>
<td>Sting</td>
<td>Tell peer that an imaginary character has been electrocuted or that an imaginary character will buzz or sting them.</td>
</tr>
<tr>
<td>Swing arms</td>
<td>Swing arms toward peer.</td>
</tr>
</tbody>
</table>
Table 2. Definitions of aggressive categories found only in episodes of real aggression

<table>
<thead>
<tr>
<th>Aggression</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insult</td>
<td>Say a derogatory statement towards peer.</td>
</tr>
<tr>
<td>Intrude on privacy</td>
<td>Invade a person's privacy (e.g., open bathroom door).</td>
</tr>
<tr>
<td>Name-call</td>
<td>Insulting a peer by calling them a name that they do not like (e.g., stupid, chicken).</td>
</tr>
<tr>
<td>Stop play</td>
<td>Inhibit the use of a play object (e.g., a peer puts his hand on an umbrella to stop it from twirling).</td>
</tr>
<tr>
<td>Taunt</td>
<td>&quot;To provoke peer with insults.&quot; (Malloy, 1994, p. 84). Often involves a song or rhythm to nonsense syllables.</td>
</tr>
<tr>
<td>Tease</td>
<td>To make fun of a peer.</td>
</tr>
<tr>
<td>Write on</td>
<td>To write on peer with marker.</td>
</tr>
</tbody>
</table>
Table 3. Definitions of aggressive categories found in real and pretend aggression

<table>
<thead>
<tr>
<th>Aggression</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chase</td>
<td>Run after peer.</td>
</tr>
<tr>
<td>Destroy</td>
<td>Break apart a real object.</td>
</tr>
<tr>
<td>Grab</td>
<td>&quot;Taking hold of an object or peer with hand&quot; (Malloy, 1994, p. 80).</td>
</tr>
<tr>
<td>Hit</td>
<td>&quot;Striking a peer with hand or object&quot; (Malloy, 1994, p. 80) (e.g., pat, punch).</td>
</tr>
<tr>
<td>Hit object</td>
<td>Strike an object with hand or other object.</td>
</tr>
<tr>
<td>Kick</td>
<td>&quot;Hit peer or object with foot&quot; (Malloy, 1994, p. 81).</td>
</tr>
<tr>
<td>Knock</td>
<td>To hit a structure down or to tap a fist on a peer's head.</td>
</tr>
<tr>
<td>Pull</td>
<td>Hold onto an object and tug it toward you.</td>
</tr>
<tr>
<td>Push</td>
<td>&quot;Moving peer or object with body, body part, or other object&quot; (Malloy, 1994, p. 81).</td>
</tr>
<tr>
<td>Stand/sit on body</td>
<td>Stand or sit on the body part of a peer.</td>
</tr>
<tr>
<td>Tackle</td>
<td>Forcefully put arms around peer.</td>
</tr>
<tr>
<td>Threaten</td>
<td>Using words to inform a peer of intentions to harm (e.g., threaten to hit or shoot).</td>
</tr>
<tr>
<td>Throw</td>
<td>&quot;To propel an object into the air or at a peer&quot; (Malloy, 1994, p. 84).</td>
</tr>
<tr>
<td>Walk/run into body</td>
<td>Walk or run into peers' body.</td>
</tr>
<tr>
<td>Wave stick</td>
<td>Waving stick or cardboard container.</td>
</tr>
<tr>
<td>Wrestle</td>
<td>To pull each other down to the ground.</td>
</tr>
</tbody>
</table>
Table 4. Definition of nonaggressive categories found only in episodes of pretend aggression

<table>
<thead>
<tr>
<th>Nonaggressive</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Accepting a peers suggestion or information.</td>
</tr>
<tr>
<td>Build</td>
<td>Construct products with classroom materials (e.g., blocks, Legos, plastic connecting pieces).</td>
</tr>
<tr>
<td>Climbs</td>
<td>Use hands and legs to pull up the body onto an object (e.g., tires, tree, playground equipment).</td>
</tr>
<tr>
<td>Comply</td>
<td>Follow direction of peer or teacher.</td>
</tr>
<tr>
<td>Disagree</td>
<td>Inform peer that you do not agree with their suggestion or information.</td>
</tr>
<tr>
<td>Gain attention</td>
<td>Call child's name.</td>
</tr>
<tr>
<td>Hurt</td>
<td>Cause bodily harm to a peer.</td>
</tr>
<tr>
<td>Inform adult</td>
<td>Provide knowledge to an adult about a person, object, or action.</td>
</tr>
<tr>
<td>Jump</td>
<td>Push off from the ground with your feet.</td>
</tr>
<tr>
<td>Label</td>
<td>Tell peer the name of an imaginary character.</td>
</tr>
<tr>
<td>Observe</td>
<td>Watch what a peer is doing.</td>
</tr>
<tr>
<td>Roll/crawl</td>
<td>Moving on hands and knees.</td>
</tr>
<tr>
<td>Run</td>
<td>Move feet forward very fast.</td>
</tr>
<tr>
<td>Suggest alternative</td>
<td>Suggest a play activity to replace the current play.</td>
</tr>
</tbody>
</table>
Table 5. Definitions of nonaggressive categories found only in episodes of real aggression

<table>
<thead>
<tr>
<th>Nonaggressive</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apology</td>
<td>Child tells peer he is sorry.</td>
</tr>
<tr>
<td>Follow</td>
<td>Walk after a peer.</td>
</tr>
<tr>
<td>Gossip</td>
<td>Talking about a peer to other children.</td>
</tr>
<tr>
<td>Leaves</td>
<td>Walk to another area in the room.</td>
</tr>
<tr>
<td>Negative emotion</td>
<td>State a negative feeling (e.g., &quot;I hate you.&quot;).</td>
</tr>
<tr>
<td>Nonaggressive</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Cry</td>
<td>&quot;A whining or wailing noise often accompanied by shedding tears&quot; (Malloy, 1994, p. 80).</td>
</tr>
<tr>
<td>Direction</td>
<td>&quot;Instructing or ordering a peer&quot; (Malloy, 1994, p. 80) (e.g., &quot;Let go!&quot;, &quot;Get out!&quot;, &quot;Give me that!&quot;).</td>
</tr>
<tr>
<td>Explain</td>
<td>Give peer reasons for behavior.</td>
</tr>
<tr>
<td>Give Object</td>
<td>Hand an object to a peer.</td>
</tr>
<tr>
<td>&quot;I’m telling&quot;</td>
<td>Telling an adult or threatening to tell an adult about the actions of a peer.</td>
</tr>
<tr>
<td>Ignore</td>
<td>&quot;Child continues previous activity and does not respond to peer&quot; (Malloy, 1994, p. 83).</td>
</tr>
<tr>
<td>Inform</td>
<td>&quot;Provide knowledge to a peer about a person, object, or action&quot; (Malloy, 1994, p. 83) (e.g., &quot;I didn’t.&quot;).</td>
</tr>
<tr>
<td>Laugh</td>
<td>To smile and make ha, ha, ha sounds.</td>
</tr>
<tr>
<td>Mine</td>
<td>&quot;Child states possession with the word mine&quot; (Malloy, 1994, p. 81).</td>
</tr>
<tr>
<td>Move away</td>
<td>Walk away from peer.</td>
</tr>
<tr>
<td>Move object</td>
<td>Pick up an object or move an object to a different location.</td>
</tr>
<tr>
<td>Question</td>
<td>&quot;Asking for information&quot; (Malloy, 1994, p. 81).</td>
</tr>
<tr>
<td>Nonaggressive</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reach</td>
<td>&quot;Extending a hand toward an object or peer&quot; (Malloy, 1994, p. 81).</td>
</tr>
<tr>
<td>Scream</td>
<td>&quot;Loud verbal noise with no speech sounds&quot; (Malloy, 1994, p. 81).</td>
</tr>
<tr>
<td>State rule</td>
<td>Tell peer a classroom rule.</td>
</tr>
<tr>
<td>Verbal protesting</td>
<td>&quot;The child says don't, no or the peer's name&quot; (Malloy, 1994, p. 81).</td>
</tr>
</tbody>
</table>
Table 7. Definitions of categories from teacher interventions in episodes of real aggression or pretend aggression

<table>
<thead>
<tr>
<th>Teacher Intervention</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active listening</td>
<td>Repeating or paraphrasing what a child said.</td>
</tr>
<tr>
<td>Apology</td>
<td>Ask aggressor to apologize.</td>
</tr>
<tr>
<td>Consequence</td>
<td>Tell child what will happen if they continue their current behavior.</td>
</tr>
<tr>
<td>Counting</td>
<td>Slowly counting to stop a child's behavior (e.g., one..., two..., three...).</td>
</tr>
<tr>
<td>Direction</td>
<td>&quot;Instructing or ordering a child&quot; (Malloy, 1994, p. 85) (e.g., &quot;Sit down&quot;, &quot;Come here.&quot;).</td>
</tr>
<tr>
<td>Examine Injury</td>
<td>Look at a child's injury.</td>
</tr>
<tr>
<td>Explain</td>
<td>Offer reasons for a rule or behavior.</td>
</tr>
<tr>
<td>Feeling</td>
<td>Ask child how they are feeling.</td>
</tr>
<tr>
<td>Follow child</td>
<td>Walk after a child.</td>
</tr>
<tr>
<td>Gain attention</td>
<td>Call a child's name.</td>
</tr>
<tr>
<td>Give object back</td>
<td>Give an object to a child previously taken away from him or her.</td>
</tr>
<tr>
<td>Inform</td>
<td>&quot;Provide knowledge to a child about an object, person, or action&quot; (Malloy, 1994, p. 85). (e.g., &quot;there's a book with words we don't say in kindergarten&quot;).</td>
</tr>
<tr>
<td>Offer solution</td>
<td>Suggest a way to solve a problem.</td>
</tr>
<tr>
<td>Teacher Intervention</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Positive reinforcement</td>
<td>Encourage a child's behaviors with words or actions (e.g., &quot;Great strategy&quot;, &quot;Good listening&quot;, &quot;Thanks for being calm&quot;, &quot;Thanks for telling me&quot;).</td>
</tr>
<tr>
<td>Question</td>
<td>&quot;Asking the child questions to identify the problem, to discover what the child wants, and to understand what the child is doing&quot; (Malloy, 1994, p. 85).</td>
</tr>
<tr>
<td>Remove child</td>
<td>&quot;Take a child from a situation or area of the room&quot; (Malloy, 1994, p. 85) (e.g., timeout).</td>
</tr>
<tr>
<td>Remove object</td>
<td>Take an object from a child.</td>
</tr>
<tr>
<td>Share experience</td>
<td>Teacher tells child how she feels now or during a related experience.</td>
</tr>
<tr>
<td>State a rule</td>
<td>Tell the child a rule (e.g., need to be calm, need to be nice, need to share, no being silly, no name calling, no kicking, no throwing, no poking, no pushing, no shoving, no teasing).</td>
</tr>
<tr>
<td>Suggest an alternative</td>
<td>Tell the child to think of a new way to do the activity or show an activity that the children can do instead of the current activity (e.g., jumping off a stump).</td>
</tr>
<tr>
<td>Sympathize</td>
<td>Tell the target of aggression that you are sorry that the aggressor hurt them.</td>
</tr>
<tr>
<td>Teacher presence</td>
<td>Teacher walks toward children.</td>
</tr>
<tr>
<td>Tell child what to say</td>
<td>Telling a child the words he or she should say.</td>
</tr>
</tbody>
</table>
APPENDIX D. CHILDREN'S DRAWINGS
ROBIN

BAT MAN + D

X MEN

[Hand-drawn figures: Batman and possibly X-Men characters]
PICTURE
APPENDIX E. LETTERS
August 25, 1997

Dear Full-day Kindergarten Parent:

We are professors in the Department of Human Development and Family Studies at Iowa State University. During 1997-1998 we are planning to conduct a research study in the full-day kindergarten program located in the Child Development Laboratory School, Iowa State University.

We are interested in describing the culture of the kindergarten classroom. This description will serve as the context in which we will examine several specific questions related to peer relationships, teacher/child relationships, children's play, cultural diversity, and curriculum development. In addition, Heidi Malloy, a doctoral student, will be completing her dissertation on children's aggression. Through this research, we will contribute to the literature on child development and early childhood education.

The database will be collected by recording the children's naturally occurring behavior through written notes, audiocassette tapes, and videotapes. The children will be observed by research observers for three days a week during the 1997-1998 academic year. As research observers participate in the classroom, they will take written notes based on their observations. The participants will be videotaped for 3 days a week for 18 weeks (9 weeks during Fall Semester, 1997, and 9 weeks during Spring Semester, 1998). In addition, children's play behaviors will be recorded, and a sociogram will be individually administered to each child several times during the year. Teachers and parents will also be asked to complete a social skills questionnaire. In addition, informal and formal interviews may be conducted with teachers, children, and/or families. A research team of 5 to 8 students and faculty will collect these data. The study will begin on August 27, 1997 and end on May 7, 1998. The videotaping, audiocassette recording, and the presence of participant observers will be explained to the children. Your child will not be placed at any risk or discomfort. All observations of your child, except for the individually administered sociograms, will be made as they are occurring during the daily classroom activities.
The database collected during the academic year will be used for research, publications, presentations, and educational purposes. Your child will be identified by a pseudonym (false name) whenever he/she is discussed in published articles or in oral presentations. When short sequences of the videotapes or audiocassette tapes are presented at a public forum, every effort will be made to protect the identity of your child. The videotapes, observational notes, interviews, play scale, social skills questionnaires, and sociograms will be available for faculty and students in the Department of Human Development and Family Studies on a limited basis through the approval of Drs. McMurray-Schwarz and Herwig. Any persons using the data collected in this study will be required to keep all of the information confidential.

We would very much appreciate the involvement of you and your child in this project. Please complete the form below and return it as soon as possible to Dr. Paula McMurray-Schwarz, 101 Child Development Building, or to Ms. your kindergarten teacher. You are free to discontinue your participation in the study at any time. If you have any questions or concerns about the study, please contact Dr. Paula McMurray-Schwarz (294-0785) or Dr. Joan Herwig (294-6230). We would be happy to discuss the project with you.

Thank you for your careful consideration of this request. In advance, we appreciate your time and cooperation in helping us learn more about the culture of the kindergarten classroom.

Sincerely,

Paula McMurray-Schwarz, Ph.D.
Assistant Professor

Joan Herwig, Ph.D.
Associate Professor
Director of the Child and Development Laboratory School
PERMISSION FORM

FOR THE COMPREHENSIVE ETHNOGRAPHY OF THE FULL-DAY
KINDERGARTEN PROGRAM

The general purpose and procedures of the research have been explained to me in the attached letter. I understand that all information will be kept confidential and neither my child, my spouse, nor I will be identified by name. I understand that my child and I are free to withdraw from the study at any time. The Department of Human Development and Family Studies and the University Human Subjects Committee has approved this research.

Please check the preferred option and return this form as soon as possible to Dr. Paula McMurray-Schwarz, 101 Child Development Building, or to Ms. your kindergarten teacher. We greatly appreciate your consideration of this request.

[ ] I will participate and I give my permission for my child [____________] (print child's name) to participate in the research conducted by Dr. Paula McMurray-Schwarz and Dr. Joan Herwig at Iowa State University.

[ ] We are not willing to participate in this research project as described in the attached letter.

__________________________  ________________________
Parent's/Guardian's Signature    Date
August 25, 1997

Dear Full-day Kindergarten Teacher:

We are professors in the Department of Human Development and Family Studies at Iowa State University. During 1997-1998 we are planning to conduct a research study in the full-day kindergarten program located in the Child Development Laboratory School, Iowa State University.

We are interested in describing the culture of the kindergarten classroom. This description will serve as the context in which we will examine several specific questions related to peer relationships, teacher/child relationships, children's play, cultural diversity, and curriculum development. In addition, Heidi Malloy, a doctoral student, will be completing her dissertation on children's aggression. Through this research, we will contribute to the literature on child development and early childhood education.

The database will be collected by recording the children's naturally occurring behavior through written notes, audiocassettes, and videotapes. The children will be observed by research observers for three days a week during the 1997-1998 academic year. As research observers participate in the classroom, they will take written notes based on their observations. The participants will be videotaped for 3 days a week for 18 weeks (9 weeks during Fall Semester, 1997, and 9 weeks during Spring Semester, 1998). In addition, children's play behaviors will be recorded, and a sociogram will be individually administered to each child several times during the year. Teachers and parents will also be asked to complete a social skills questionnaire. In addition, informal and formal interviews may be conducted with teachers, children, and/or families. A research team of 5 to 8 students and faculty will collect these data. The study will begin on August 27, 1997 and end on May 7, 1998. The videotaping, audiocassette recording, and the presence of participant observers will be explained to the children. Classroom participants will not be placed at any risk or discomfort. All observations, except for the individually administered sociograms, will be made as they are occurring during the daily classroom activities.
The database collected during the academic year will be used for research, publications, presentations, and educational purposes. All classroom participants will be identified by a pseudonym (false name) whenever they are discussed in published articles or in oral presentations. When short sequences of the videotapes or audiocassette tapes are presented at a public forum, every effort will be made to protect the identity of the classroom participants. The videotapes, observational notes, interviews, play scale, social skills questionnaires, and sociograms will be available for faculty and students in the Department of Human Development and Family Studies on a limited basis through the approval of Drs. McMurray-Schwarz and Herwig. Any persons using the data collected in this study will be required to keep all of the information confidential.

We would very much appreciate the involvement of you and your kindergartners in this project. We are looking forward to receiving your consent and working with you. Please complete the form below and return it as soon as possible to Dr. Paula McMurray-Schwarz, 101 Child Development Building. You are free to discontinue your participation in the study at any time. If you have any questions or concerns about the study, please contact Dr. Paula McMurray-Schwarz (294-0785) or Dr. Joan Herwig (294-6230). We would be happy to discuss the project with you.

Thank you for your careful consideration of this request. In advance, we appreciate your time and cooperation in helping us learn more about the culture of the kindergarten classroom.

Sincerely,

Paula McMurray-Schwarz, Ph.D.
Assistant Professor

Joan Herwig, Ph.D.
Associate Professor
Director of the Child and Development Laboratory School
PERMISSION FORM

FOR THE COMPREHENSIVE ETHNOGRAPHY OF THE FULL-DAY KINDERGARTEN PROGRAM

The general purpose and procedures of the research have been explained to me in the attached letter. I understand that all information will be kept confidential and I will not be identified by name. I understand that I am free to withdraw from the study at any time. The Department of Human Development and Family Studies and the University Human Subjects Committee has approved this research.

Please check the preferred option and return this form as soon as possible to Dr. Paula McMurray-Schwarz, 101 Child Development Building. We greatly appreciate your consideration of this request.

[ ] I will participate in the research conducted by Dr. Paula McMurray-Schwarz and Dr. Joan Herwig at Iowa State University.

[ ] I am not willing to participate in this research project.

_________________________________________  ________________________
Teacher’s Signature                        Date
REFERENCES


ACKNOWLEDGMENTS

There are several people to whom I would like to express my appreciation. I would like to thank Dr. Paula McMurray-Schwarz and Dr. Carla Peterson, my major professors, for their support, time, patience, and encouragement with this investigation and throughout my graduate education.

I also wish to thank my other committee members, Dr. Jacques Lempers, Dr. Kathleen Waggoner, Dr. Mary Jane Brotherson, and Dr. Sedahlia Crase for their support and suggestions.

A thank you to the members of the research team, Dr. Joan Herwig for her suggestions and insights into the kindergarten classroom, Kristine Johnson, Susan Umscheid, Rochelle Coffman, and Younghee Steenhoek for their dedication to videotaping the classroom, and Lisa Underhill and Megan Magill for their hours of transcribing the recordings of the weekly research team meetings.

A special thank you to the teachers and children who participated in the study, because without them this research would not be possible. I would especially like to thank the head teacher for her lessons on respect, trust, and compromise when working with young children.

Thank you to the Graduate College and the College of Family and Consumer Sciences for their financial assistance.

Finally, to my friends and family, thank you for your continued love, patience, encouragement, and support.