To the Graduate Council:

I am submitting herewith a dissertation written by Jeffrey William Knauss entitled "The Effects of Group Assertiveness Training on the Aggressive Behaviors and Self-Concepts of Fourth Grade Boys." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Psychology and Guidance.

Donald J. Dickinson

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We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

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Graduate Studies and Research

THE EFFECTS OF GROUP ASSERTIVENESS TRAINING ON THE AGGRESSIVE BEHAVIORS AND SELF-CONCEPTS OF FOURTH GRADE BOYS

A Dissertation

Presented for the

Doctor of Education

Degree

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Jeffrey William Knauss

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DEDICATION

To Susanne for her assistance, support

understanding, and love.

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ABSTRACT

The literature suggests that aggressive behavior can be reduced in a variety of ways. Many of the programs used contain components of assertiveness training. In addition, it has been suggested that assertiveness training seems like a viable methodology for reducing children's aggressive behavior. However, substantial research is lacking in the area. Similarly, it has been suggested that assertiveness training should improve the self-concept. The studies done to date are equivocal in their results.

The literature suggests that direct behavior observation is the preferred methodology for assessing changes in the aggressive behaviors of children. Furthermore, it has been suggested that teachers can be reliable observers of aggressive behavior. However, many questions remain to be answered. The present study presented an opportunity to explore the question of whether a teacher checklist can be used as a reliability check on more precise observations.

Subjects for the study were twelve fourth grade boys. The subjects were divided into two groups of six boys each. The study followed a multiple baseline design with staggered and continuous treatment.

It was hypothesized that: (1) The frequency of aggressive behaviors would decrease as a result of assertiveness training. (2) The self-concepts of the boys in the program would increase. An alpha level of 0.05 was selected as the level of statistical significance.

Hypothesis I was tested by subjecting the group data to correlated sample t-tests. Data for the individual subjects was analyzed descriptively. The group data did not support Hypothesis I. However, nine of the twelve subjects showed a decrease in aggressive behavior across the various conditions of the study. Overall, the data suggest that group assertiveness training cannot be ruled out as a procedure for changing aggressive behavior in children.

Hypothesis II was tested using a pre and post test administration of The Piers-Harris Children's Self Concept Scale. Changes in self-concept were evaluated using the criterion in the test manual of a ten point change indicating significance at the 0.05 level. One boy in each group showed a significant positive change in self-concept and one boy in each group showed a significant negative change in self-concept. Overall, Hypothesis II was not supported.

The data for the teacher checklist and the behavioral observations was analyzed using the Pearson product-moment coefficient of correlation. The correlations were significant for only two of the subjects. Therefore, it was concluded that the data does not support the viability of using a teacher checklist as a reliability check rather than a second observer.

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CHAPTER I

INTRODUCTION, PURPOSE, AND RELATED LITERATURE

I. Introduction

In recent years there has been a dramatic increase in the interest in aggression. This intensified interest in aggression seems to coincide with the marked increase in crimes of violence in the United States and other parts of the world. Along with the rise of violent crime in general, violent crimes by juveniles has increased dramatically. Additionally, there is a body of research that indicates that children who display socially disapproved, disruptive and aggressive behavior in school are significantly more likely to become delinquent (Feldhusen, Thurstone, and Benning, 1971). In a society where parents and teachers are assigned the task of training children so that they interact socially without mutual aggression or self-destruction (Feshbach and Feshbach, 1971), it is not surprising that parents and teachers are expressing a great deal of concern (Doyal, Fergueson, and Rockwood, 1971; Keister, 1976).

Disruptive, aggressive behavior represents one of the most frequent reasons that children are referred by classroom teachers for counseling (Miller and Brown, 1976). These children present serious classroom problems. They are often difficult to deal with and emotional strain and physical demands on teachers may prove substantial (Feldhusen, Thurston, and Benning; Gittleman, 1965). Feshbach and

Feshbach (1971) indicated that although advances have been made in our understanding of aggression, there is still much concern about the causes of aggression and especially how to decrease aggression.

II. Purpose

The primary purpose of the present study was to explore the viability of assertiveness training as a way of reducing aggressive classroom behavior in fourth grade boys. Direct observations of behavior were used to assess the impact of the treatment program on the occurrence of aggressive behavior.

Much of the theoretical literature on assertiveness training suggests that an appropriately assertive person, in contrast to a non-assertive or aggressive person, will feel better about himself or herself (Alberti and Emmons, 1974; Lange, Rimm, and Loxley, 1975). The results of the research on the effects of assertiveness training on the self-concept is equivocal. Consequently, this study addressed whether the assertiveness training program had any effect on the self-concepts of the fourth grade boys who participated in the program. The Piers-Harris Children's Self Concept Scale (CSCS) was chosen to assess changes in self concept (Counselor Recordings and Tests, 1969).

A final question is a methodological one involving teachers as observers. There are studies suggesting that teacher rankings of exceptional students are valid and accurate (Greenwood, Walker, Todd, and Hyman, 1976; Walker and Hops, 1973) and that teachers can observe at least single behaviors reliably (Hall, Fox, Willard, Goldsmith,

Emerson, Owen, Davis, and Porcia, 1971). However, many questions and possible ways of using teachers as observers need to be explored. The present study provided an opportunity to explore the question of whether a teacher checklist can function as a viable alternative to traditional reliability checks using a second observer.

III. Review of Related Literature

The present study was directly concerned with the effects assertiveness training had on the aggressive behaviors and self-concepts of fourth grade boys. The literature reviewed focused primarily on areas related to that concern.

Definition of Aggression

The term aggression is used in many ways and, as is true of many terms used in psychology, there is no universally agreed upon definition. Instead, each researcher seems to use a personally modified definition of the term. For example, Berkowitz (1974) points out that some authors suggest that any action, physical or psychological, that harms another person can be defined as aggression. While Berkowitz does not disagree with such a definition of aggression, he feels that any definition of aggression must include the behavior and the purpose of the behavior. Thus, Berkowitz agrees with the definition formulated by Dollard, Dobb, Miller, Mower, and Sears (1939) which defines aggression as a behavior, "the goal response to which is the injury of the person whom it is directed" (p. 9).

Patterson (1975) suggests that coercive behavior is really very much like aggressive behavior and that children use a variety of coercive behaviors such as crying, whinning, tantrums, teasing and negativism as well as obviously aggressive behaviors, such as hitting to control other people and get what they want. Thus, Patterson's view of aggressive behavior contains the elements of the definition suggested by Dollard et al. (1939) and embraced by Berkowitz (1974). In addition it might be said that aggressive behavior may have other goals besides injuring the person towards whom it is directed. For example, the goal for aggressive behavior may be to gain attention.

Patterson's (1975) definition of aggressive behavior gives support to the Alberti and Emmons (1974) definition of aggressive behavior. They see aggressive behavior as self-enhancing behavior which usually achieves the desired goal at the expense of hurting others, either physically or psychologically. The definitions of Patterson (1975) and Alberti and Emmons (1974) seem the most complete in that they consider the goal of an aggressive act in a broader perspective than Dollard et al. (1939) and Berkowitz (1974) and, therefore, were used as the standard for the definition of aggressive behavior in the study. Aggressive behaviors included physical aggression, verbal agression and several behaviors which do not clearly fit under either physical or verbal aggression. Specifically, aggressive behaviors were operationally defined as: (1) hitting, (2) poking, (3) pinching, (4) kicking, (5) pulling hair, (6) tripping, (7) pushing or shoving, (8) destroying property, (9) banging objects, (10) statements such as, "I'll

get even," "You won't get away with that," "I'll show him," and other expressions of revenge, (11) teasing, (12) screaming or yelling out inappropriately, (13) cursing, (14) blaming others, (15) temper tantrums, and (16) refusing to answer when asked questions (Kirschner and Levine, 1975; Parish, Maly, and Shirazi, 1975; Sines, Pauker, Sines, and Owen, 1969).

Theories on the Nature and Source of Aggression

Two distinct theories on the nature and source of aggression have predominated psychological theory. The first is psychoanalytic theory and the second is learning theory. Psychoanalytic theory, while not ignoring the role of learning in the development of aggression, relegates its importance a weak second to the biological nature of the impulses. Learning theory, while not ignoring the biological nature of the impulses, expresses the importance of learning both in the causation of aggression and the manner in which it is expressed (Eron, Walder, and Lefkowitz, 1971). Recent empirical evidence on aggression supports social learning theory. That is, aggressive behavior is a learned response, maintained through a system of reinforcements (Patterson, 1975; Patterson and Cobb, 1971, 1973; Patterson and Littman, 1967), or that modeling and identification are major factors in the acquisition of aggressive behavior (Bandura, 1973).

Patterson (1975) contends that, eventually, a pattern of agression has far reaching effects. Such a child, among other things is labeled deviant, punished more, tends not to develop appropriate social

skills, is rejected by peers and developes a negative evaluation of self and others.

Ways of Reducing Children's Aggressive Behaviors

A review of the literature indicates that a variety of techniques have been used to deal with children's aggressive behaviors. Wahler (1967) found that a combination of praise for prosocial behavior and time-out for deviant behavior brought the child's behavior under control and increased responsiveness to parental authority.

Berkowitz (1974) reviewed a number of studies which have shown promise for dealing with children's aggression. Overall, he notes that the literature indicates that aggression is most effectively controlled by minimizing children's contact with aggression evoking stimuli and by eliciting actions incompatible with aggression when aggression evoking stimuli are encountered.

Buss (1966) presented empirical evidence that observing the harmful consequences of aggression and the development of feelings such as guilt, anxiety and sympathy suppresses aggression. This is consistent with a study that found that highly empathetic six and seven year old boys are less aggressive (Feshbach and Feshbach, 1971).

Reasoning and thinking have also been shown to be effective in reducing aggressive behaviors. Bandura and Walters (1963) have demonstrated that when children are shown how misbehavior can hurt others and alternative ways of behaving are suggested that children begin to act less aggressively. A series of experiments by Berkowitz (1965), Berkowitz, Corwin and Hieronimus (1963), and Berkowitz and Green (1967)

suggest that the labeling of an aggressive act as "bad," "immoral" or "unjust" by a respected authority figure inhibits children's aggressive behaviors.

It has also been shown that aggression may be inhibited by arousing affiliative motives or positive attitudes as opposed to only those feelings involving fear or discomfort. Gordan and Cohen (1963) did a study in which five year old children did not show as much aggression in a play situation after a story about affiliative relationships and positive attitudes as children who were told a nonaffiliative relationship story involving fear and discomfort.

In summary, the research presents evidence that actions incompatible with aggression do reduce the frequency of aggressive behaviors and can be elicited in a number of ways. These include observing harmful consequences of aggression, labeling the observed aggression as "unjustified" by a respected authority figure, reasoning and thinking and arousing affiliative motives or positive attitudes.

The Case for Assertiveness Training

Assertiveness training is a counseling method with the potential for reducing aggressive behavior. It incorporates discussion of the consequences of aggression and how misbehavior can harm others and provides alternative ways of behaving (Lollar, Korn, and Haddle, 1976). When used as a group approach, it promotes affiliation with the other members of the group. Furthermore, assertiveness training has the potential for correcting or preventing some of the far reaching effects

of aggressive behavior documented by Patterson (1965), such as the failure to develop social skills, rejection by peers and the development of a negative evaluation of self.

Assertiveness training is designed to increase a person's ability to utilize assertive behavior in socially appropriate ways. As conceptualized by Alberti and Emmons (1974), behaviors fall on a continuum moving from nonassertive behavior to assertive behavior occupying the other end of the continuum (Appendix A). More recently, aggressive behavior and nonassertive, or acquiescent behavior have been conceptualized as two sides of a coin with assertive behavior opposite to both (Rohrbauch, 1977). Regardless, the proponents of assertiveness training regard much aggressive behavior as the result of not expressing feelings of anger or not knowing how to express feelings in a way that will facilitate the achievement of a goal without putting the other person down. Assertive behavior is defined as interpersonal behavior which is expressive, self-enhancing, freely chosen behavior which may facilitate the achievement of a desired goal for the initiator without depreciating or evoking guilt or anger on the part of the person toward whom the assertive response is directed. Thus, assertive behavior differs from aggressive behavior primarily in that it is socially appropriate and does not result in the depreciation of either person.

Alberti and Emmons (1974) suggest, "If you go through life inhibited, giving in to the wishes of others, holding your desires inside yourself, or conversely destroying others in order to have your own way, your feelings of personal worth will be low" (p. 3). Alberti and

Emmons (1974) and Patterson (1975) are in agreement. Aggressive behavior eventually results in a negative evaluation of self. One of the underlying assumptions of assertiveness training is that changing a behavior such as nonassertiveness or aggressiveness should result in more positive feelings about the self (Lang et al., 1975). Therefore, it seems that assertiveness training, which is specifically designed to deal with dysfunctional interpersonal behaviors (Flowers, Cooper, and Whiteley, 1975), is an appropriate strategy for decreasing aggressive behavior and developing more positive feelings about the self.

Assertiveness Training and Aggression

Three references were found in the literature suggesting the efficacy of assertiveness training with aggressive adults. Wallace, Teiger, Lieberman, and Baker (1973) and Foy, Eisler, and Pinkston (1975) worked with single subjects who were hospitalized. Rimm, Hill, Brown, and Stuart (1974) researched the use of group assertiveness training in the treatment of the expression of inappropriate anger in college men.

The subject in the study by Wallace et al. (1973) was confined to a hospital and was exhibiting destructive behavior within the hospital. The destructive behavior was treated with contingency contracting, but it was felt that in order to be able to continually suppress his aggressive behavior, the patient would need to learn how to respond appropriately to frustrating situations. Hierarchies were constructed surrounding various hospital themes. Assertiveness training

consisted of role playing and attention to non-verbal components of the patient's behavior such as eye contact, posture and gestures. The decision to have the patient move on to more threatening situations in the hierarchies was made based on his performance on in vivo situations perpetrated by the staff without the patient's knowledge that they were testing him. Following treatment the patient's behavior remained appropriate for nine months.

The patient in the study by Foy et al. (1975) was a fifty-six year old male whose wife had left him because he beat her. His hospitalization was precipitated by an explosive argument with his work foreman. An assertiveness training program involving role playing, modeling and instructions was instituted. The role playing scenes included three scenes based on specific conflicts experienced by the patient. Four additional scenes involved potentially difficult interpersonal situations. The patient had no further violent episodes at a six month follow-up. The patient reported a significant improvement in his relationship with his son. Since his relationship with his son was not part of the assertiveness training program, the authors point to this improvement as evidence of generalization of effects.

Rim et al. (1974) worked with a group of male college students with a history of expressing anger inappropriately. Assertiveness training was done in a group setting using behavioral rehearsal as a primary therapeutic technique. The researchers found that the men developed the ability to be appropriately assertive in specific situations.

The literature contains few references on the use of assertiveness training with children who exhibit aggressive behavior. There is, however, an unpublished study by Lollar, Korn, and Haddle (1976) on assertiveness training with aggressive and nonaggressive children. There are also a number of studies that utilize components of assertiveness training with children who exhibit aggressive behaviors (Doyal, Fergeuson, and Rockwood, 1971; Ferinden, 1971; Giebink, Stover, and Fahl, 1968; Gittleman, 1965; Kirschner and Levin, 1975; Pitkänen, 1974).

The study by Lollar et al. (1976) compared the effects of assertiveness training and a behavior self-modification technique on the transition from an elementary school to a middle school. The study was done using mixed groups of aggressive and nonassertive children. The intervention groups, when compared with randomly selected children who were not part of the program, showed a significant decrease in aggression, as measured by teacher ratings on the Missouri Behavior Checklist. The children's scores, including the aggression score, on the Missouri Children's Picture Series showed no significant change as a result of the interventions.

A study by Pitkänen (1974) tested the hypothesis that a combination of cognitive training and observational learning with the goal of helping children recognize alternatives to aggressive behavior would decrease the number of aggressive responses and increase cooperative behaviors. Pitkänen's hypothesis was supported in the role play situation she devised as a post-test of treatment effects. However, she

suggests that since only immediate effects were studied, further research should include actual behavioral observations.

Kirschner and Levin (1975) instituted a program for aggressive school children whose primary components were tangible rewards, such as games, models and field trips, behavior rehearsal, modeling and group activities. The program significantly reduced incidents of aggressiveness.

Gittleman (1965) worked with a group of twelve to fourteen year old boys. He first asked the boys to identify situations in which they behaved aggressively. Using behavioral rehearsal and peer ratings he was able to modify specific aggressive behavior. Gittleman constructed the role playing in a hierarchial fashion thereby building a desensitization procedure into his program. The positive changes in behavior were reported anecdotally.

Ferinden (1971) reported the successful use of behavioristic psychodrama and self-monitoring techniques for modifying aggressive behavior in children. He used the entire class of which the aggressive children were part, bringing their behavior to the attention of the class. The other children helped to determine whether or not the subjects were honest regarding their self-monitoring behavior.

Several researchers reported successfully reducing aggressive behavior using a largely cognitive approach. Doyal et al. (1971) demonstrated that a program to help third grade children understand (1) that aggression is a common form of behavior that should be understood, accepted, modified and controlled, (2) that it is the manner of

expressing anger that causes concern, and that acts appropriate to one situation may not be appropriate to another, and (3) that methods of handling aggression that tend to decrease counter aggression are more desirable, decreased aggressive responses on an instrument designed for the study.

Giebink et al. (1968) were successful in decreasing aggressive responses to a questionnaire following an instructional program designed to increase adaptive responses to frustration. The instructional approach was a highly cognitive one that emphasized the verbal mediation of overt behavior. Overt behavior also improved, but did not change as significantly.

Although the literature is sparse on the use of assertiveness training to reduce aggressive behaviors, there seems to be sufficient reason to believe that an assertiveness training program could prove beneficial in helping aggressive children develop more appropriate response styles. This hypothesis is supported by the studies which report success in reducing aggressive behavior or attitudes by utilizing role playing, behavioral rehearsal and various cognitive approaches as part of their programs. Furthermore, there are practitioners who have used assertiveness training with aggressive children and feel that it is an effective means of reducing aggressive behaviors (Palmer, 1976; Phillips, 1976). Both Phillips and Palmer have worked with individual children. Palmer suggests making it clear that aggressive behavior is not acceptable, clarifying options, exploring the consequences of each option, and holding the child accountable for his or her behavior.

Overview

The major use of assertiveness training has been to help non-assertive, socially withdrawn persons express themselves honestly and effectively in socially appropriate ways (Alberti and Emmons, 1974; Rim and Masters, 1974). However, experimenters and clinicians have found assertiveness training helpful in a wide variety of problems.

Assertiveness training has found a great deal of popularity and use in the feminist movement helping women to become appropriately assertive and to stand up for their rights (Jakubowski-Spector, 1973). Crisis intervention (Balson, 1971), pervasive anxiety (Cautela, 1966), depression (Seitz, 1971), and the treatment of psychotic behavior (Nydegger, 1972) are other areas where assertiveness training has been found useful.

Assertiveness training has also been used to treat a variety of sexual problems ranging from heterosexual anxiety to sexual offenses such as, homosexuality and homosexual pedophilia (D'Zurilla, 1969; Edwards, 1972; Geinsinger, 1969; Serber, 1972; Stevenson and Wolpe, 1960).

Assertiveness training has not been used as extensively with children as with adults. However, Johnson, Tyler, Thompson and Jones (1971) compared the effectiveness of systematic desensitization and assertiveness training as a way of alleviating speech anxiety in children who were afraid to speak in front of the class. Speech anxiety was reduced for both groups. There was no significant post-treatment differences fot eht treatment groups. Patterson (1972) used

assertiveness training procedures to successfully reduce crying and dependency behaviors in a nine year old child.

Assertiveness Training and Self-Concept

Three recent research studies, all unpublished doctoral dissertations, present equivocal results on the effects of assertiveness training on the self-concept. For example, Miller (1974) found that no significant differences emerged on the self-concepts of adolescent female delinquents on The Tennessee Self-Concept Scale as a result of assertiveness training.

Kornfeld (1974) found a significant difference in the self-concept of adolescent male delinquents on the Physical Appearance and Attributes Scale of The Piers-Harris Children's Self Concept Scale. However, she found no significant differences on the Behavior School Status, Anxiety, Popularity, and Happiness and Satisfaction scales. Kornfeld suggests that influences outside the institution may have had a greater impact on the boys than the assertiveness training program.

A recent study found that college women felt more positive about themselves following group assertiveness training (Ball, 1976). The Tennessee Self-Concept Scale was utilized to measure the self-concept.

IV. Summary

In summary, the literature suggests that aggressive behavior can be reduced in a variety of ways. Many of the programs used contain components of assertiveness training. In addition, it has been reported

that assertiveness training seems to have been effective in reducing children's aggressive behavior, but these claims have not been verified through research. Similarly, it has been suggested that assertiveness training should improve the self-concept. However, the studies done, to date, are equivocal in their results.

V. Hypotheses

Hypothesis I

The frequency of aggressive behaviors will decrease as a result of assertiveness training. The decrease in aggressive behaviors will be significant at the 0.05 level.

Hypothesis II

The self-concept of the boys in the assertiveness training program will increase. The increase in self-concept will average ten points between pre and post test.

CHAPTER II

EXPERIMENTAL DESIGN AND METHODOLOGY

I. Design

The present study followed a multiple baseline design with staggered and continuous treatment (Huck, Cormier, and Bounds, 1974). Group I, which was made up of six boys from one fourth grade class, had a baseline period of two weeks followed by the six week treatment program with two weeks follow-up. Group II, which was made up of six boys from another fourth grade class in the same school, had an initial baseline of two weeks. This was followed by an additional two weeks of baseline which controlled for the effects of time and attention by playing basketball during the scheduled treatment periods. The basketball game played during the treatment period was "pig." The boys and the author took turns shooting. If someone made a basket, the next person had to make the same shot. The first person to miss got the letter "P." When someone had missed enough times to get all three letters, that person was out. The extended baseline was followed by the same six week treatment program experienced by Group I. The group data were analyzed using the correlated sample t test with the level of significance established at the 0.05 level. The data for individual subjects were discussed descriptively.

The pre and post test scores on the CSCS were analyzed using the criterion in the manual (Piers, 1969). According to the test

authors, a 10 point change in self-concept is significant at the 0.05 level.

The data generated by the teacher checklist and the direct behavioral observations were analyzed using the Pearson product-moment coefficient of correlation. The level of significance was set at the 0.05 level.

II. Subjects and Setting

The study was conducted at Farragut Intermediate School, which is part of the Knox County School System, Knoxville, Tennessee. All the subjects were fourth grade students. The subjects were identified by a survey of aggressive behaviors (Appendix B) taken among the fourth grade teachers about three months before the projected starting date of the study.

Four fourth grade teachers indicated that they had a minimum of five children in their classrooms who displayed one or more of the agreessive behaviors outlined on the survey. Furthermore, according to the teacher, the behaviors were occurring a minimum of five times per week per child. Follow-up interviews were conducted to more accurately ascertain the frequency of the behaviors exhibited and the setting(s) in which the behaviors were most likely to occur. In addition, the teachers were told what would be required of them if they were to participate in the study.

For a variety of reasons, including children moving and parent conferences about a child's behavior, many of the children initially

described as aggressive were either no longer attending Farragut Intermediate School or were no longer exhibiting the target behaviors frequently when final selection of subjects was taking place three months after the initial survey. Two classrooms remained with enough children exhibiting the target behaviors frequently enough to make the study feasible.

One teacher had six boys who, in her opinion, were displaying the aggressive behaviors a minimum of five times per week. The other teacher had six boys and one girl who continued to display the aggressive behaviors at least five times per week. The girl was dropped from the population because it seemed advisable to have the groups composed of the same sex children (Gazda, 1975).

The final population consisted of six boys from each of the two rooms. The boys from one of the rooms became Group I and will be identified as subjects one through six. The boys from the other room became Group II and will be identified as subjects seven through twelve.

Demographic information of the twelve boys who participated in the study is provided in Table 2.1. The ages of the boys ranges from nine years, five months to eleven years, five months with all but two of the boys ranging in age from mine years, five months to ten years, five months. The two older boys were each retained for one year in first grade. Three of the boys, including the two who were retained, were reading on a beginning fourth grade level at the end of their fourth grade year. The rest of the boys will start a fifth grade reader when they enter the fifth grade. Their levels of intellectual

TABLE 2.1

Subject Demographic Information

Subject	Age in Years - Months	Intellectual Functioning	Retentions	Reading Level	SES
Group I					
1	11 - 5	86	1	4	Low
2	10 - 2	111	0	5	Middle
3	10 - 5	NA	0	5	Middle
4	10 - 1	127	0	5	Middle
5	9 - 5	NA	0	5	Middle
6	9 - 8	94	0	4	Middle
Group II					
7	11 - 5	104	1	4	Low
8	10 - 3	122	0	5	Middle
9	10 - 6	116	0	5	Middle
10	10 - 1	112	0	5	Middle
11	9 - 9	108	0	5	Middle
12	9 - 7	126	0	5	Middle

functioning range from low average to superior, according to the group administered Otis-Lennon Test of Mental Ability. Two of the boys come from homes judged to be of a low socio-economic level, while the remaining boys are from middle to upper middle class homes.

III. Observation Procedures

The twelve boys were observed every Monday, Wednesday and Friday throughout the duration of the study. Observations took place from 8:00 to 8:45 A.M., 9:30 to 11:00 A.M. and 2:00 to 3:00 P.M. The times were selected because they represented at least two periods during the school day when aggressive behaviors were likely to occur. That is, the thirty minutes before the start of the formal school day and the thirty minute recess period in the afternoon were considered times when it was likely that aggressive behaviors would occur. The remaining times were selected because they were adjacent to those times when aggressive behaviors were likely to occur and they were times when the six target children from each classroom would be in the room at the same time.

During the morning observations and the first half of the afternoon sessions, the observers were seated in positions where they were able to see all six of the target children. When two observers were present at the same time, for the purpose of reliability checks, they were seated close together so that they were likely to have the same perspective on the classroom.

During recess the observers had to vary their positions depending on what type of activity the target children were engaged in. As was

true of the classroom situation, when two observers were watching the same group of children, they stood at the same location.

Observations consisted of simple frequency counts of the sixteen behaviors included in the operational definition of aggression. The observers used data sheets which listed the sixteen target behaviors across the top of the sheet. The children were listed by the observers along the left side of the page with the page held broadside (Appendix C). There was one additional category of behavior labeled "other." The "other" category was included because of the possibility of the children exhibiting a clearly aggressive behavior not included in the sixteen behaviors. Space was provided at the bottom of the page for anecdotal descriptions of anything recorded in the "other" category. The observers were also encouraged to keep anecdotal notes on things such as antecedents or results of an aggressive behavior.

Selection and Training of Observers

Behavioral observers were recruited from classes in the Educational Psychology and Guidance Department and the Curriculum and Instruction Department at the University of Tennessee, Knoxville. Arrangements were made to offer course credit in behavioral analysis through the Education Psychology and Guidance Department for participating in the study as an observer.

Observations were begun one week before the start of the study to give the observers a chance to become acquainted with the target children, the physical environment, and most importantly, to insure

reliability of observation. All the observers achieved a minimum of 80 percent reliability during the checkout period.

Reliability Checks

Observers were scheduled so that at least one reliability check was done each week on each observer. Consequently, there was at least one reliability check in each classroom during both the morning and afternoon sessions each week. The reliability was estimated by forming a fraction from the frequency of aggressive behaviors observed for each child. The smaller frequency was divided by the larger frequency and multiplied by 100 (Kazdin, 1975). According to Kazdin (1975), the resulting percentage is an estimated percentage of reliability because there is no way to insure that when behavior is recorded, using a frequency count, that the observer and reliability checker have recorded the same behavior at the same time even though the final frequency counts concur. The main observers were selected a priori. Therefore, the data presented were consistently that of the person designated the observer for a particular classroom and time period. Occasional absences could not be prevented. In those cases, the person substituting for the observer was considered the observer for that session.

Teachers as Observers

The use of direct behavior observations in the classroom to assess the impact of treatment on aggressive behaviors has been suggested as an important step (Pitkänen, 1974). Typically, the

observations are done by outside observers (Parish et al., 1975). However, teachers have been used to chart fighting behavior by checking whether or not the behavior occurred during a specified time period (Kirschner and Levin, 1975).

Greenwood et al. (1976), in a thorough review of the literature on teachers as observers, reports several important trends. The first is that teachers have been increasingly used as a primary referral source for a variety of exceptional children. In addition, the results of research studies focusing on the validity of teacher assessments of exceptionality have shown an increase in the validity of teacher assessments. A study by Walker and Hops (1973) demonstrated that a combination of teacher ratings and behavioral observations can be highly effective in screening and determining which low interacting children in a classroom are in need of intervention. In a recent study, Greenwood et al. (1976) showed that classroom teachers' judgement of preschoolers' social behavior was sufficiently valid and accurate to be used as a substitute for direct observation data in the identification of low interacting children when the teachers were asked to rank their children. The chance of the lowest interactor to be included in the first rankings was approximately 0.74. The researchers concluded that the cost effectiveness of utilizing teacher rankings seemed to more than offset the small identification error.

A study by Hall et al. (1971) showed that teachers can be reliable observers of classroom behavior. In their study they obtained agreement in ratings between a teacher aide and the teacher ranging

from 84 percent to 100 percent on thirteen occasions of logging talking out behavior. When a wrist counter was used, reliability was 100 percent.

Teacher Observations

The teachers used the same data sheet as the observers. They were asked to check any of the aggressive behaviors in which they saw a child engage. The teachers were told that it did not matter how often a particular behavior occurred because they were not expected to be able to do frequency counts on the sixteen different aggressive behaviors for six children at a time. The teachers were told they could check a behavior when they observed it, or whenever it was convenient. They were asked to take time at the end of the school day to go over the sheet and see if they forgot to check a behavior they remembered observing earlier in the day. This procedure was instituted well in advance of the actual data collection. Therefore, the teachers had a great deal of practice with the procedure and were completing the checklist on a daily basis.

IV. Instrumentation

The Piers-Harris Children's Self Concept Scale (CSCS) is a quickly completed (15 to 20 minutes) self report inventory designed for use with children in the third through twelfth grade (Appendix D). For children as young as fourth grade, it is recommended that the examiner read each item aloud while the children follow in their booklets.

The scale gives a total positive score and experimental subscores for the following areas: Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity and Happiness and Satisfaction. The scale is judged to have good internal stability (0.78 to 0.93) and adequate temporal stability (0.77) (Piers and Harris, 1969). Content validity was built into the scale by defining the universe to be measured as the areas in which children reported qualities they either liked or disliked about themselves. The items were factor analyzed and non-discriminating items dropped. A study by Mayer (1965) found the CSCS correlated 0.68 with The Lipsett Children's Self-Concept Scale (Piers and Harris, 1969). Other measures of concurrent validity are also cited.

V. Pre-Treatment Procedures

After the target children were identified, parental permission was obtained. The parents were contacted by telephone. The program was explained to them and they were given the opportunity to ask questions about the program. The parents were told they would receive a letter from the principal (Appendix E) and a parental permission form (Appendix F) which had to be signed and returned to the author.

When the parent permission forms had been received, the target children were interviewed individually. The purpose of the interview was to explain the purpose of the program, answer any questions the children had about the program and ascertain the willingness of each child to participate (Ohlson, 1970). The children were permitted to

decide if they wanted to participate even though parental permission had already been received.

The CSCS was administered to both groups of children at the end of the baseline period for each of the respective groups. The children were encouraged to respond to the items the way they really felt, rather than how they thought they should respond. This was done by saying to the children, "Answer the items as you really feel you are, not as you ought to be" (Piers, 1969, p. 8). Each item was read aloud to the children while they followed in their booklets.

VI. Treatment

Treatment consisted of eleven one hour sessions, which were held in the counseling office. The sessions were held twice weekly with the exception of the second week of treatment when only one session was held. The change in format was necessitated by a field trip involving the children in Group I. In order to keep the treatment uniform across Groups I and II, only one treatment session was conducted during the second week of the treatment phase for Group II. The last treatment session included the post treatment administration of the CSCS.

The major components of the assertiveness training program included a cognitive component which focused on the differences between nonassertive, assertive and aggressive behaviors, role playing, behavior rehearsal, modeling, feedback and homework. The components included in the assertiveness training program have all been considered important parts of assertiveness training by other researchers (Alberti and

Emmons, 1974; McFall and Twentyman, 1973). The author served as group facilitator by providing group structure, pacing the group, asking questions when appropriate, occasionally modeling a response, and providing feedback. A detailed description of the treatment program follows.

Session I began with a discussion of group rules. The purpose of establishing group rules was to set limits and begin to establish acceptable behavior. The development of rules also set the range for the process of establishing trust. That is, it was believed that if children know that confidentiality will be observed, they should begin to feel better about relating to the group leader and other children. The first session concluded with a modification of the exercises Getting to Know You and Getting to Know About You (Thompson and Poppen, 1975). The purpose of the exercise was to help the children become better acquainted, to help them listen to one another more effectively, to communicate with the group and to develop confidence in sharing thoughts and feelings with a group.

The exercise consisted of having one of the children state his favorite sport and television program. The person to the right of the first person had to repeat what the person before had said before stating his favorite sport and television program. After the completion of the first round, the children suggested additional categories which they felt would help them learn more about the other children. Examples of categories suggested by the children included favorite school subject, least favorite school subject, favorite color and one thing you are good at doing.

Session II consisted of a brief review of Session I and an introduction to role-playing. The children were told that role-playing involves acting out situations and feelings. They were also told that role-playing sometimes helps us to understand our behaviors and feelings better and that it also helps us understand what others do and feel. Finally, the children were told that role-playing is a way of practicing different ways of behaving before trying it out in a real situation. No attempt was made to make the technical distinction between role-playing and behavioral rehearsal. First, the children drew slips of paper with the following situations written on them: eating an ice cream cone on a hot day, walking across a hot pavement with bare feet, trying to get warm on a cold day, trying to lift a heavy box, walking on an ice covered pavement and sucking a lemon. The other children guessed what the child acting out the scene was doing. Other children were allowed to act out some of the other scenes after everyone had his chance to do the situation he had picked. Following the scenes, the children drew slips with a feeling on it. They were told to express the feeling without using words. The six feelings were: happy, sad, excited, angry, scared and surprised. The session concluded with the boys role-plaing a situation that involved two boys playing ball. A third boy asked if he could play. The other boys did not want to include him. The boys were told that they could use words for the scene. Roles were switched frequently. Following the role-playing the feelings the boys had while playing a part, the various strategies used by the boys who were playing ball and the strategies used by the boy who wanted to play were discussed.

Session III continued the focus on role playing with an exercise called Motives for Our Behavior (Thompson and Poppen, 1975). Role-playing consisted of having the boys standing in line with one of the boys trying to break into line. Following the role-playing, a discussion was held. The following questions were discussed: How do you feel when someone tries to push in front of you? What reasons does a person have for pushing in line? Finally, the question was raised, what other ways might a person who tries to push into line be handled? All the various suggestions were role-played with frequent changing of roles. The suggestions included fighting, not saying anything and asking the person to go to the back of the line. The feelings involved in each of the alternatives and the implications of each were discussed.

Session IV started with a review of the alternative ways of dealing with someone who pushes into line. The methods were labeled "Bulldozer" (aggressive) behavior, "Don't Try" (nonassertive) behavior and "Speak-up" (assertive) behavior. The boys were then shown a number of Peanuts characters in various situations. They were asked to identify the situations as an example of "Bulldozer," "Don't Try" or "Speak-up" behavior. The boys were then given a hand-out (Appendix G). The various points outlined under each behavior were discussed with regard to the role playing exercise Motives for Our Behavior and personal experiences.

Session V began with a brief review of the behavior styles. A discussion was held which focused on the fact that sometimes "Speak-up" behavior does not work and that "Bulldozer" behavior may sometimes be

appropriate. These possible situations were discussed. The boys were then asked to think of all the "Bulldozer" behaviors in which they sometimes engaged. The behaviors were divided into "Physical" and "Speaking" "Bulldozer" behaviors and written on the blackboard.

Session VI focused on non-verbal components of "Speak-up" behavior. Eye contact, facial expression, posture and voice tone were discussed. The non-verbal components were modeled in the context of asking someone who had pushed in line to go to the back and wait their turn. Each of the boys was given an opportunity to practice. After each of the boys had his turn the group voted on who had done the best job and what had made it the best. Special attention was given to the non-verbal components.

At the beginning of Session VII checklists were given to the boys (Appendix H). The behaviors on the checklist were generated by the boys in Session V. The boys were told that they were to put a mark in the appropriate box whenever they did one of the "Bulldozer" behaviors. It was emphasized that they could be as honest as they wanted to because no one would check on them, but that it would be more fun if they tried to do a good job of record keeping. They were also encouraged to keep notes on anything they thought was important on the back of the lists. It was explained that occurrences in the classroom which they reported and were concerned about could be role-played during the group meetings. The three behavior styles were again reviewed. The boys were reminded that the goal was to reduce the number of "Bulldozer" behaviors.

Sessions VIII through X focused on the behavior checklists. The "Bulldozer" behaviors checked by the boys were discussed. Situations that were important to the boys were role-played. Alternative responses were explored and practiced through role-play. Feedback on the way the boys handled situations was given. At times a possible response was suggested and modeled. The appropriateness of the modeled response was discussed.

Session XI focused on what the boys felt they had learned during the group sessions. The post test administration of the CSCS was also done.

CHAPTER III

ANALYSIS OF RESULTS

I. Introduction

The validity of the data presented regarding the impact of assertiveness training on the aggressive behaviors of fourth grade boys depends on the reliability of the observations. Therefore, the data on observer reliability precedes the Results of Hypotheses section. Following the data on observer reliability, the hypotheses are discussed relative to the results of the analysis of the data for Group I, Group II and the individual subjects. Finally, the correlations between the teacher checklists and the behavioral observations are discussed.

II. Estimated Observer Reliability

Estimated percentages of reliability for each subject were computed for both morning and afternoon sessions. An estimated percentage for each subject for all reliability checks was also computed. The estimated percentages of reliability are presented in Table 3.1.

The estimated percentages of reliability for the morning observation sessions range from 82 percent to 100 percent. They are all within the recommended lower limit of 80 percent for estimated percentages of reliability (Kazdin, 1975).

The estimated percentages of reliability for the afternoon observation sessions range from 68 percent to 100 percent. The estimated

TABLE 3.1

Estimated Percentages of Reliability

Subject	Morning Observations	Afternoon Observations	Combined
Group I			
1	91	83	87
2	97	85	91
3	82	86	84
4	89	83	86
5	83	100	91
6	100	92	96
Group II			
7	88	82	85
8	95	76	85
9	92	68	80
10	85	96	90
11	86	71	79
12	83	87	85

percentages of reliability for three of the subjects were below the recommended 80 percent. However, the three percentages below 80 percent are considerably higher than some reported by other researchers in the area of aggression which were considered adequate (Parish et al., 1975).

The estimated percentages of reliability for the combined reliability checks range from 79 percent to 91 percent. The estimated percentages of reliability fell below 80 percent for only one subject. Overall, the estimated percentages of reliability between raters was adequate.

III. Results of Hypotheses

Each hypothesis of this study used a different method of analysis. The data for Hypothesis I were analyzed using the correlated samples t test. The criterion in the CSCS manual was utilized to analyze the data for Hypothesis II. The Pearson product-moment coefficient of correlation was used to analyze the data for Hypothesis III. An alpha level of 0.05 was selected as the level of statistical significance.

Hypothesis I

This first hypothesis predicted that the frequency of aggressive behaviors would decrease as a result of assertiveness training. For Group I this hypothesis was tested by contrasting the baseline condition with the treatment condition. The baseline condition was contrasted with the follow-up condition to determine whether any decrease in

aggressive behaviors was maintained following the termination of treatment. Finally, the treatment condition was contrasted to follow-up to determine whether or not further decreases in aggressive behavior would continue to occur as a function of time. The data for the individual subjects was analyzed descriptively.

For Group II, Hypothesis I was tested by contrasting baseline I with baseline II to determine whether aggressive behaviors decreased significantly as a result of attention. Baseline I, baseline II, and baselines I and II combined were contrasted with the treatment condition to determine whether or not the assertiveness training program decreased significantly from the baseline conditions. The data for the individual subjects was analyzed descriptively.

Group I. The means for Group I showed a steady decline across conditions from baseline to treatment to follow-up. A comparison of the baseline condition ($\bar{X}$ = 20.88) with the treatment condition ($\bar{X}$ = 8.56) showed that the decrease in the means of the two conditions was significant ($t = -3.00$, $df = 5$, $p < 0.05$, critical value $t = 2.57$). Similarly, when the baseline condition ($\bar{X}$ = 20.88) was contrasted with the follow-up condition ($\bar{X}$ = 6.00), the difference in the means showed a significant decrease in aggressive behavior ($t = -3.31$, $df = 5$, $p < 0.05$). Although the mean number of aggressive behaviors showed a slight decline across treatment ($\bar{X}$ = 8.56) and follow-up ($\bar{X}$ = 6.00), the change in the levels of aggressive behavior was not significant ($t = -2.28$, $df = 5$, n.s.). The data for Group I are summarized in Tables 3.2 and 3.3. It is represented graphically in Figure 3.1.

TABLE 3.2

Comparison of Conditions for the Treatment Groups
Using the Correlated Samples t Test

Groups and Conditions	Means of the Differences Across Conditions	Standard Deviation of the Differences Across Conditions	t
Group I[a]			
Baseline to treatment	-2.13	1.59	-3.00*
Baseline to follow-up	-2.45	1.66	-3.31*
Treatment to follow-up	-0.32	0.31	-2.28
Group II[a]			
Baseline I to baseline II	-1.36	1.26	-2.43
Baseline I to treatment	-1.69	1.40	-2.72*
Baseline II to treatment	-0.32	0.75	-0.96
Baseline I and II to treatment	-1.07	1.04	-2.32

[a] $df = 5$.

*$p < 0.05$, critical value $t = 2.57$.

TABLE 3.3

Mean Number of Observed Aggressive Behaviors for Baseline, Treatment and Follow-up Conditions for Group I

Subject	Baseline	Treatment	Follow-up
1	3.66	2.00	1.75
2	2.62	0.60	0.80
3	7.38	2.13	1.67
4	3.00	1.93	1.40
5	2.57	0.69	0.00
6	2.71	1.81	1.60
Group	20.88	8.56	6.00

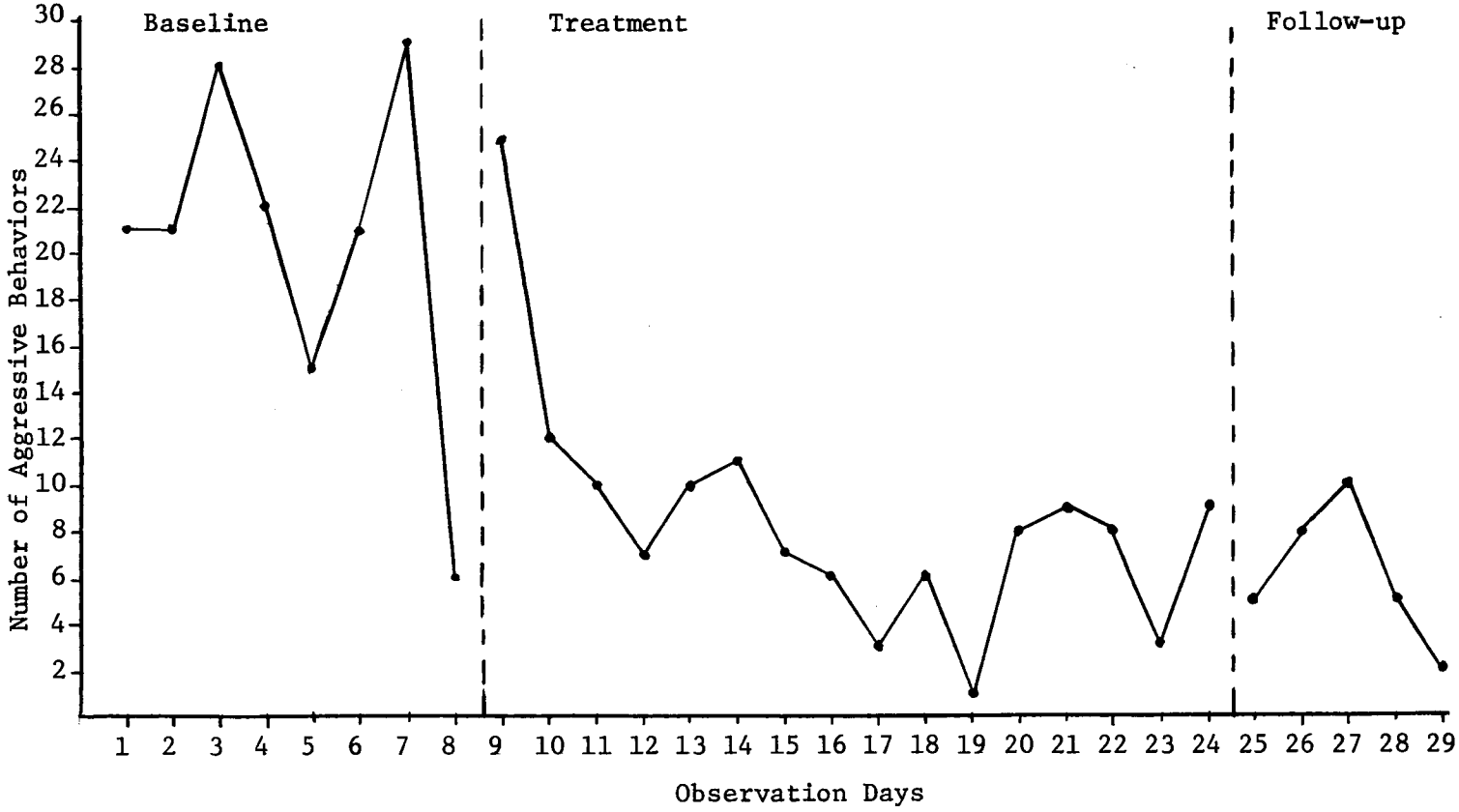

Figure 3.1. Total number of aggressive behaviors each observation day for Group I.

Group I individual subjects. The data for the individual subjects in Group I, with the exception of Subject 2, consistently showed a decrease in the mean number of aggressive behaviors across conditions. Subject 2 showed a mean increase of aggressive behavior across the treatment and follow-up conditions of 0.20. The data for the mean number of aggressive behaviors for baseline treatment and follow-up conditions for the subjects in Group I are summarized in Table 3.3.

The percentage of data points falling below the baseline mean for the treatment and follow-up conditions showed an increase across conditions for most subjects. There were two exceptions. Subject 1 showed a slight decrease in the percentage of data points falling below the baseline mean from treatment to follow-up. Subject 5 showed the same number of data points below the baseline mean in both the treatment and follow-up conditions. In both conditions, Subject 5 showed 100 percent of the data points below the baseline mean.

The percentage of data points falling below the baseline mean for each condition showed a much greater increase from baseline to treatment than from treatment to follow-up for most subjects in Group I. Subject 6 was the only exception. The increases in the percentage of data points falling below the baseline differec by only 1 percent between baseline and treatment and treatment and follow-up.

The data on the percentages of data points below the baseline mean are summarized for each subject in Table 3.4. The data for each subject is presented graphically in Figures 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

TABLE 3.4

Percentage of Data Points Below the Baseline Mean for Baseline, Treatment and Follow-up Conditions for Group I

Subject	Baseline	Treatment	Follow-up
1	50	79	75
2	50	93	100
3	29	93	100
4	25	67	80
5	57	100	100
6	57	69	80

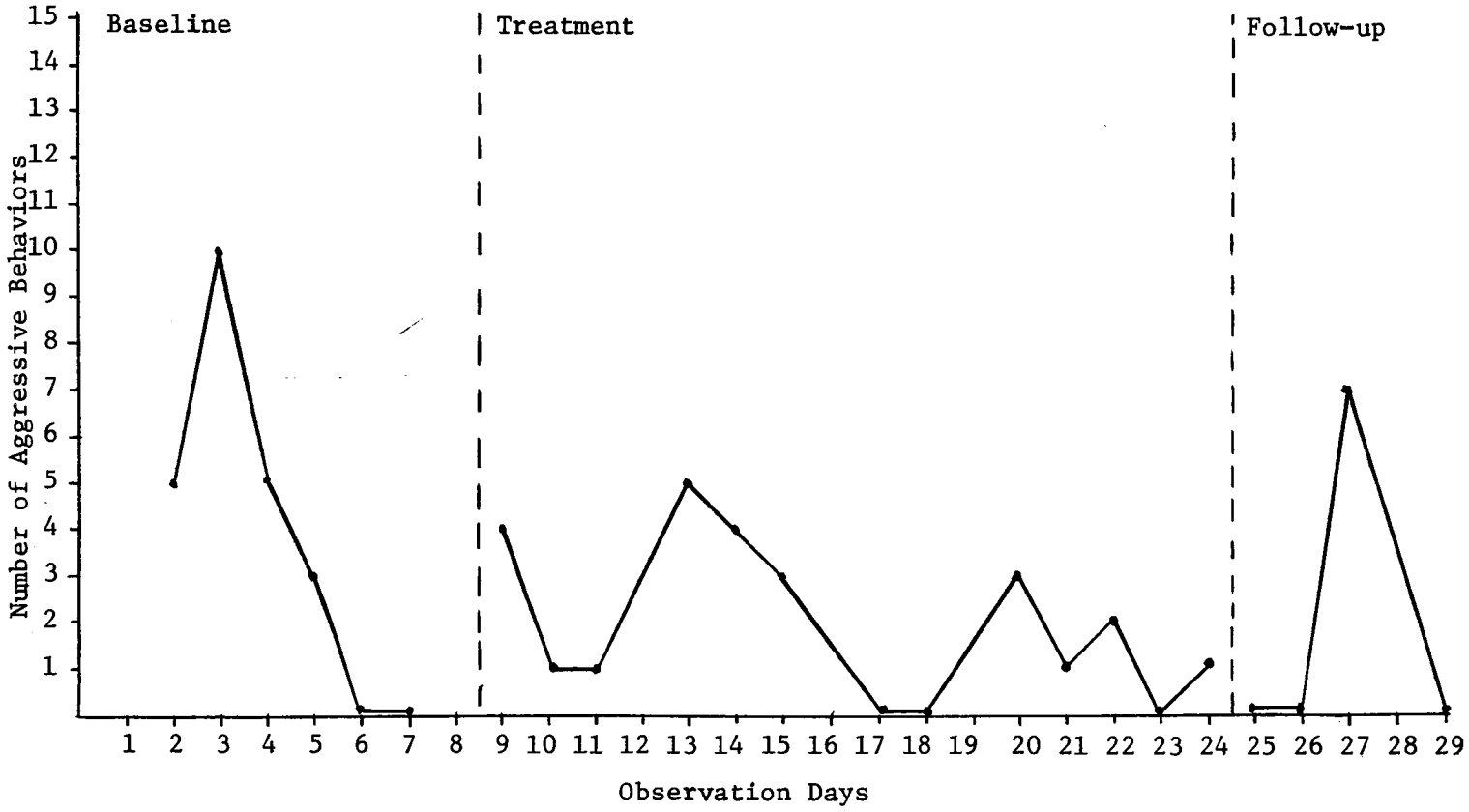

Figure 3.2. Total number of aggressive behaviors each observation day for Subject 1.

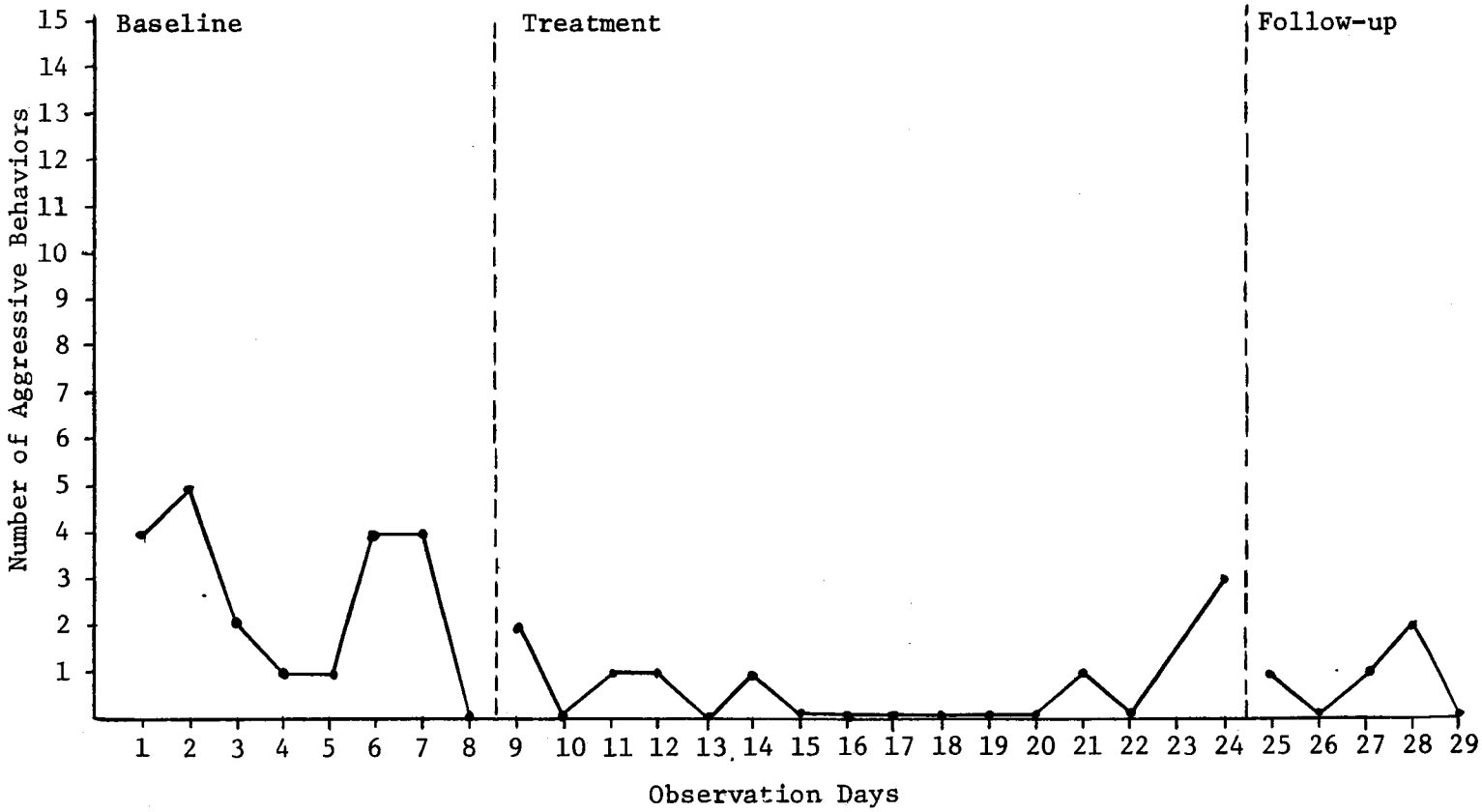

Figure 3.3. Total number of aggressive behaviors each observation day for Subject 2.

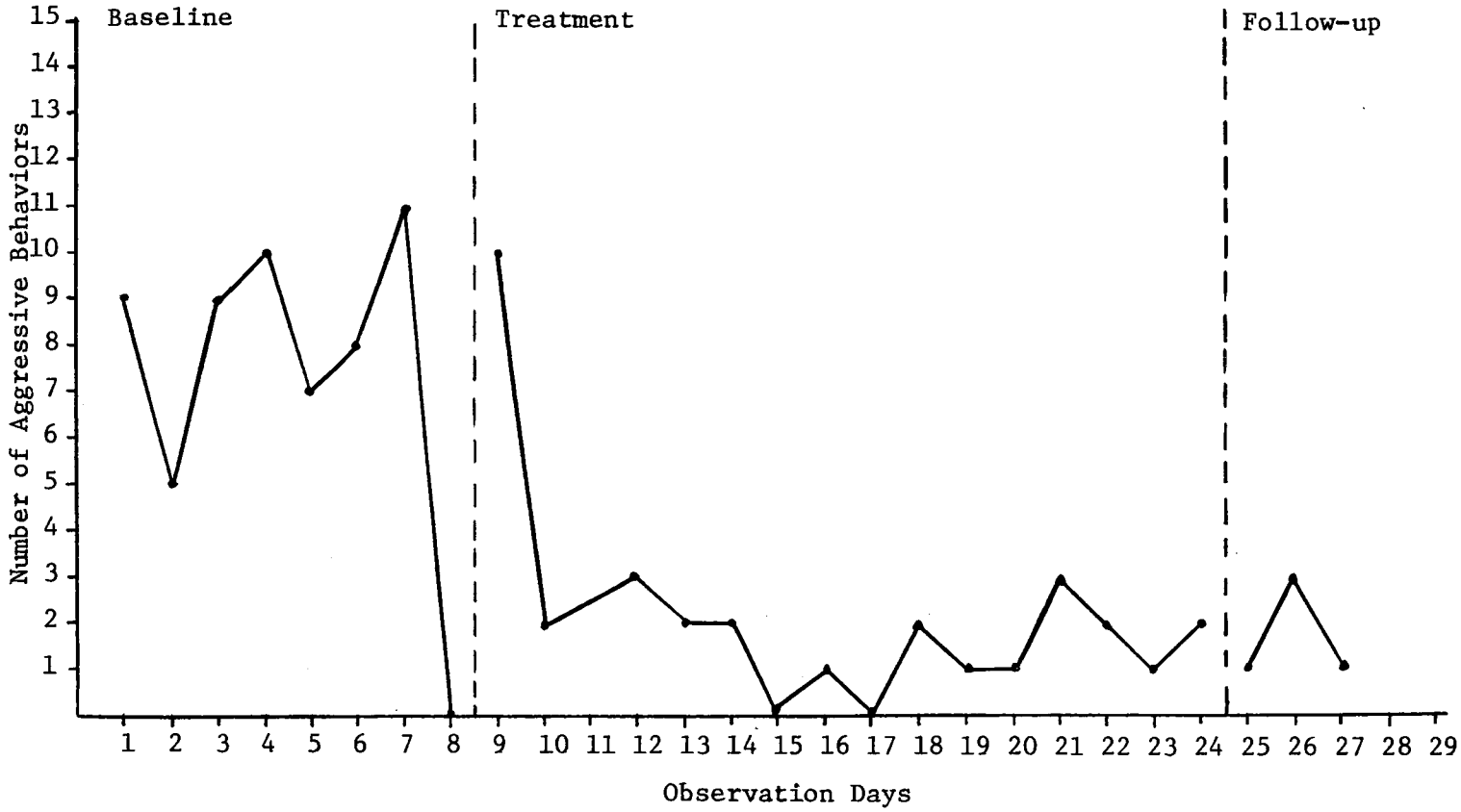

Figure 3.4. Total number of aggressive behaviors each observation day for Subject 3.

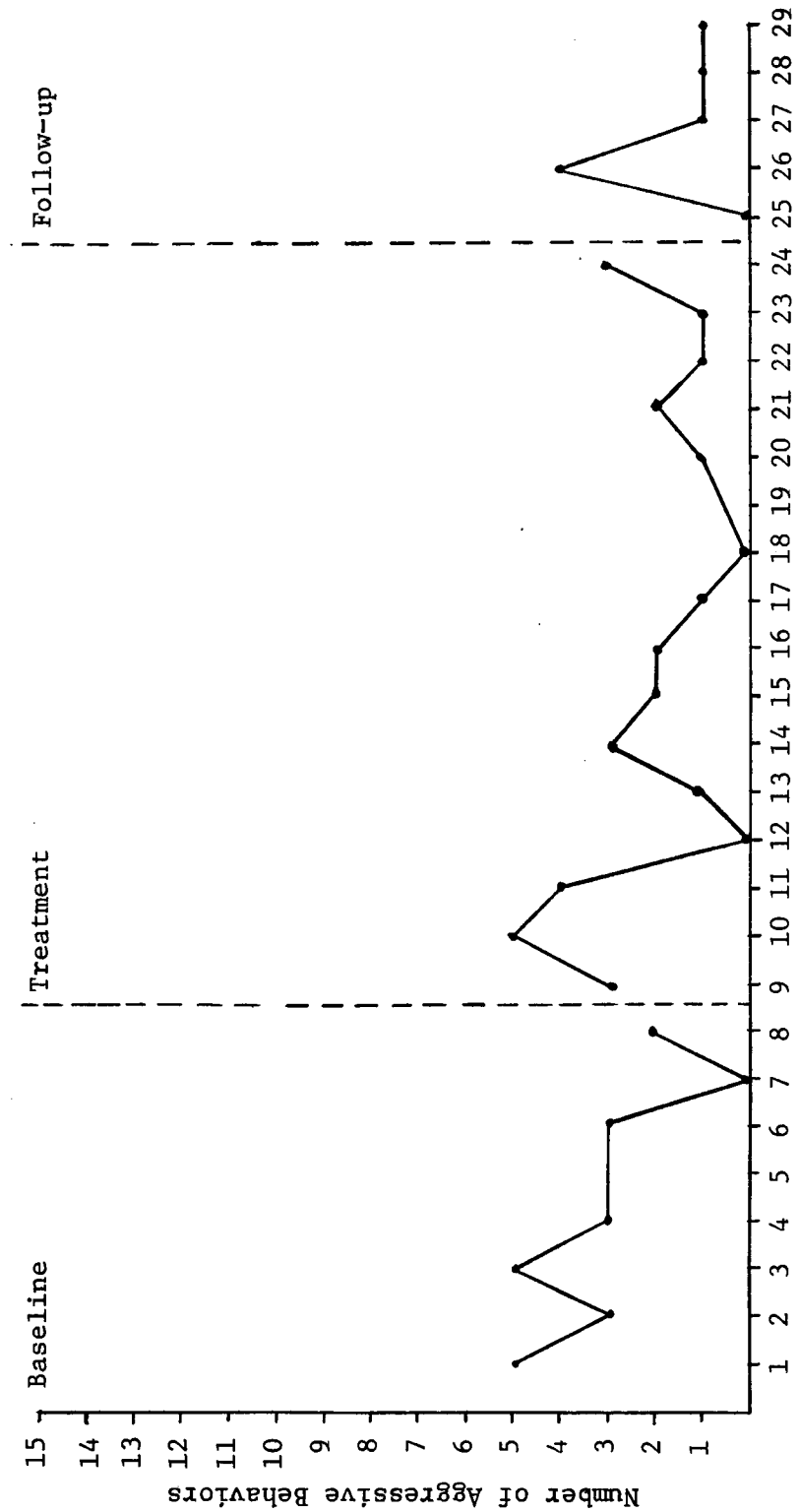

Figure 3.5. Total number of aggressive behaviors each observation day for Subject 4.

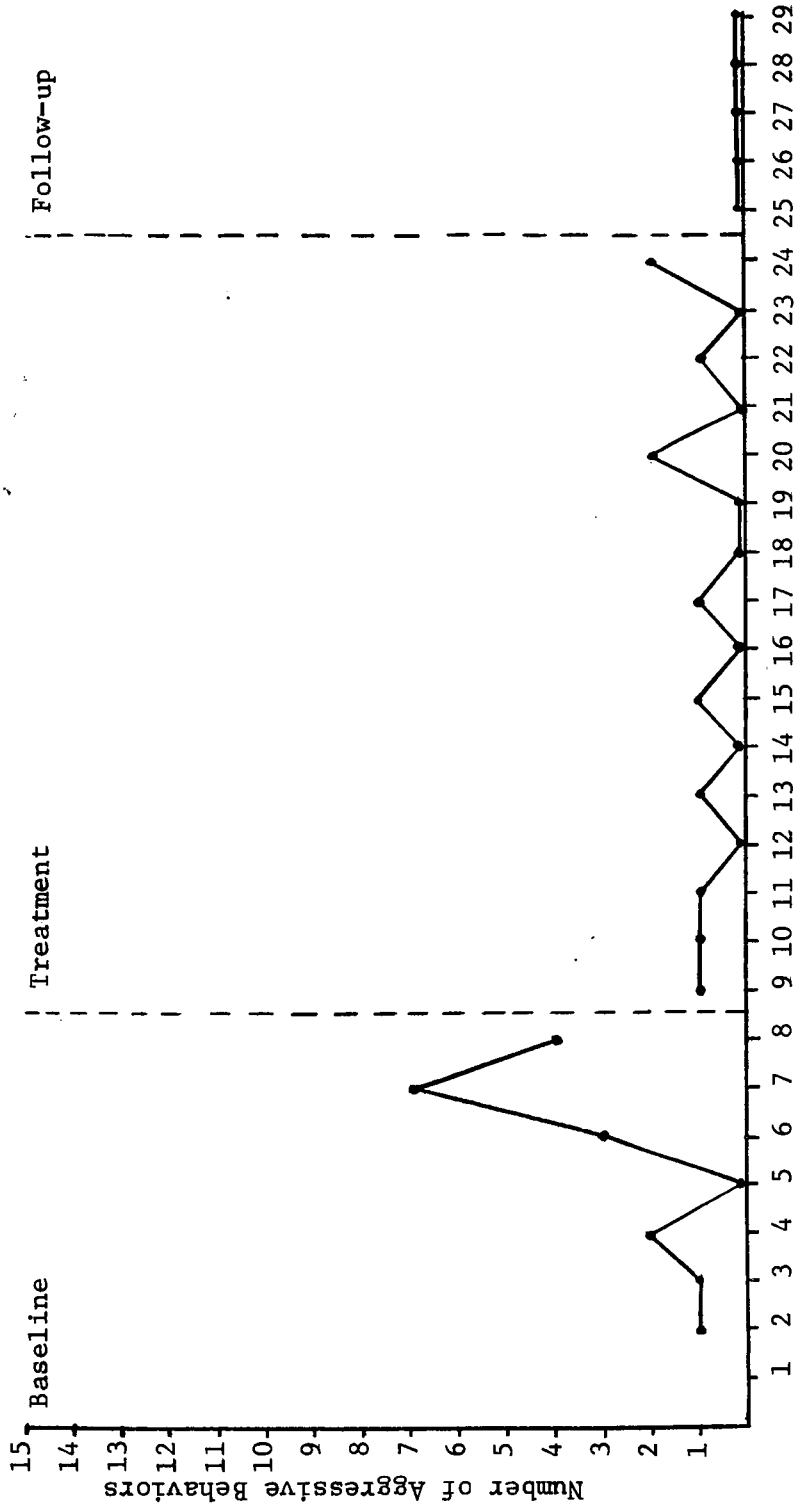

Figure 3.6. Total number of aggressive behaviors each observation day for Subject 5.

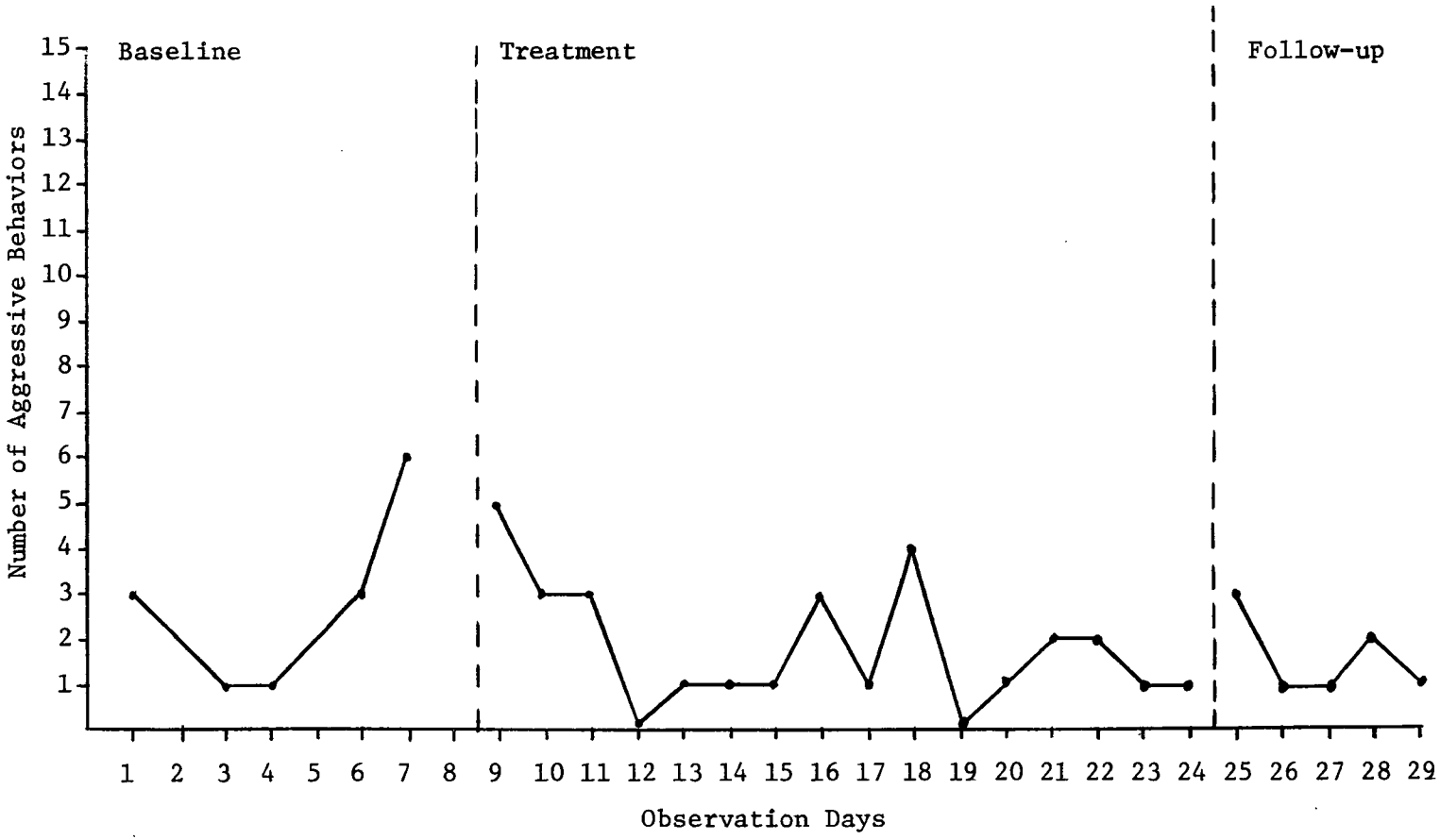

Figure 3.7. Total number of aggressive behaviors each observation day for Subject 6.

Group II. The means for Group II show a decline across conditions from baseline I to baseline II to treatment. The drop in the mean number of observed aggressive behaviors from baseline I ($\bar{X}$ = 24.0) to baseline II ($\bar{X}$ = 16.4) was large. However, it was not statistically significant (t = -2.43, df = 5, n.s., critical value t = 2.57). When the number of aggressive behaviors observed during baseline I ($\bar{X}$ = 24.0) was compared with the mean number of aggressive behaviors during treatment, the change was statistically significant (t = -2.72, df = 5, $p < 0.05$). However, the decline in the mean number of observed aggressive behaviors from baseline II ($\bar{X}$ = 16.4) to treatment ($\bar{X}$ = 14.88) was not statistically significant (t = -0.96, df = 5, n.s.).

Since the difference between the mean number of aggressive behaviors observed during baseline I and baseline II was not statistically significant, the two conditions were combined resulting in a mean across baseline I and baseline II of 21.08. The mean number of aggressive behaviors observed across both baseline conditions was compared to the mean number of aggressive behaviors observed during treatment ($\bar{X}$ = 14.88). The difference was not statistically significant (t = -2.32, df = 5, n.s.). The data for Group II are summarized in Tables 3.2 (page 37) and 3.5. It is represented graphically in Figure 3.8.

Group II individual subjects. Subjects 7, 8, and 12 showed a decrease in the mean number of aggressive behaviors across conditions. Subjects 9 and 10 both showed a slight increase in the mean number of aggressive behaviors observed from baseline II to treatment. Subject

TABLE 3.5

Mean Number of Observed Aggressive Behaviors for Baseline I, Baseline II and Treatment Conditions for Group II

Subject	Baseline I	Baseline II	Treatment
7	2.62	1.40	0.47
8	3.67	1.60	1.05
9	5.62	3.20	3.75
10	5.62	3.20	3.31
11	1.12	2.00	2.26
12	6.12	5.20	3.81
Group	24.00	16.40	14.88

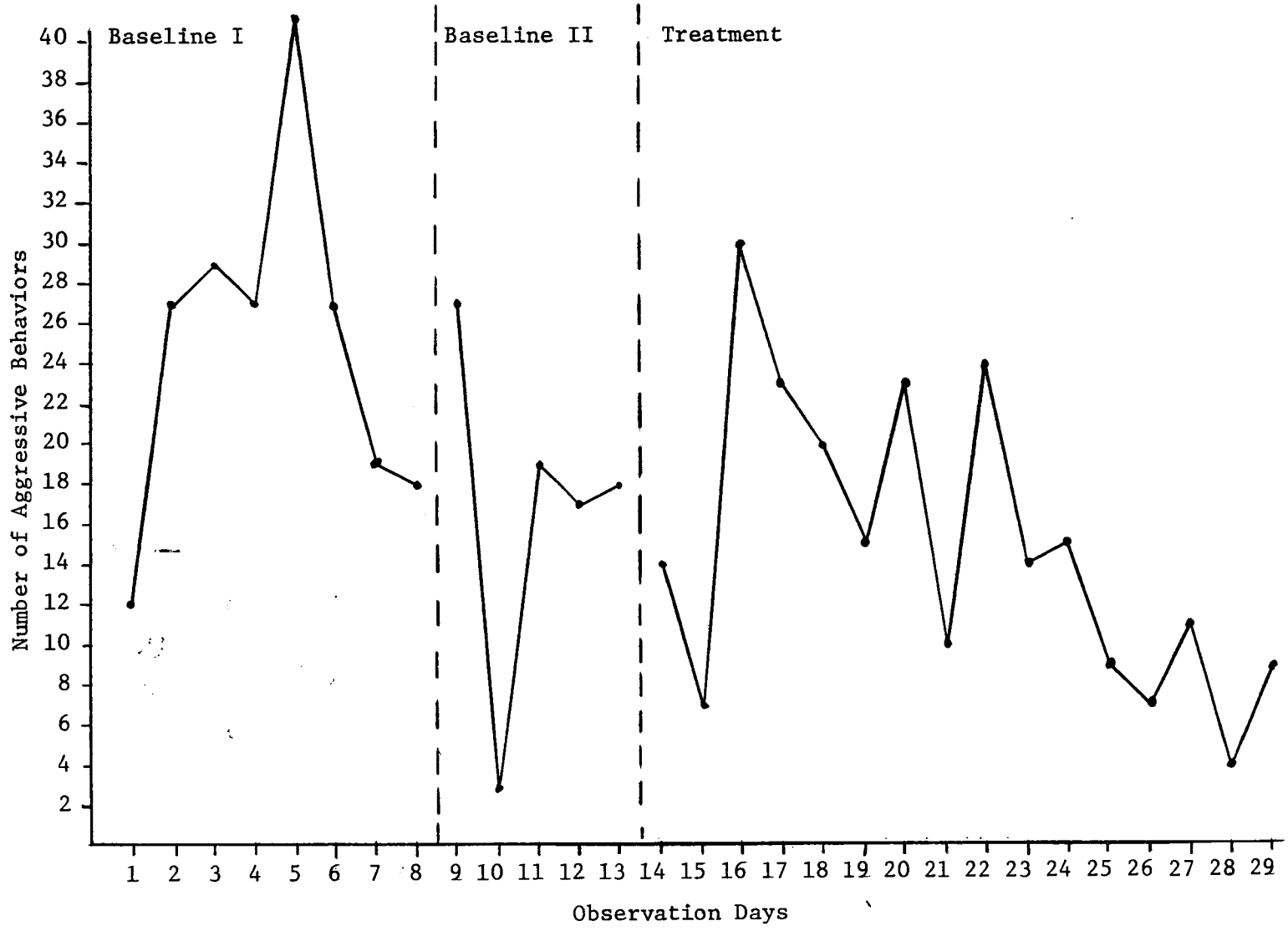

Figure 3.8. Total number of aggressive behaviors each observation day for Group II.

11 showed a slight, but steady, increase in the mean number of aggressive behaviors across conditions. The data on the mean numbers of observed aggressive behaviors across conditions are summarized in Table 3.5.

The number of data points below the baseline I mean increased across baseline I, baseline II and treatment for Subjects 7, 10, and 12. For Subjects 7, 10, and 12 the percentage increase in the number of data points below the baseline mean increased 10 percent or less between baseline I and baseline II. However, between baseline II and treatment, the number of data points below the baseline mean increased 20 percent for each of the subjects.

Subject 8 showed an increase in the number of data points below the baseline mean from baseline I to baseline II. Baseline II and treatment both had 100 percent of the data points below the baseline mean.

Subject 9 showed an increase in the number of data points below the baseline mean from baseline I to baseline II. However, the number of data points below the baseline mean decreased from baseline II to treatment.

Subject 11 showed a steady decrease in the number of data points below the baseline mean across conditions. The decrease is consistent with the increase in the mean number of aggressive behaviors below the baseline mean across conditions.

The data for the percentage of data points below the baseline I mean for the individual subjects are summarized in Table 3.6. Graphic

TABLE 3.6

Percentage of Data Points Below the Baseline I Mean for Baseline I, Baseline II and Treatment Conditions for Group II

Subject	Baseline I	Baseline II	Treatment
7	75	80	100
8	67	100	100
9	50	100	69
10	50	60	80
11	62	40	34
12	50	60	81

presentations of the data are found in Figures 3.9, 3.10, 3.11, 3.12, 3.13, and 3.14.

Conclusion. The decrease in aggressive behaviors from baseline to treatment for Group I was significant ($t = -3.00$, $df = 5$, $p < 0.05$, critical value $t = 2.57$). The decrease in aggressive behaviors across the combined baseline I and baseline II and treatment for Group II was not significant ($t = -2.32$, $df = 5$, n.s., critical value $t = 2.57$). Therefore, the hypothesis that the frequency of aggressive behaviors will decrease as the result of assertiveness training is not supported.

Hypothesis II

The second hypothesis predicted that the self-concepts of the boys in the assertiveness training program would increase. A difference of 10 points between the pre and post test administration of the CSCS is considered significant (Piers, 1969).

Any score on the CSCS between 46 and 60 is considered average (Piers, 1969). Nine of the subjects scores within the average range on the pretreatment administration. Two of the subjects scores above average and one subject scored below average.

On the post treatment administration, five of the subjects scored within the average range. Three subjects scored above average and three subjects scored below average.

The changes from the pre to post treatment administration was significant for four subjects. One subject in each group made a significant gain in self-concept as measured by the CSCS and one subject in

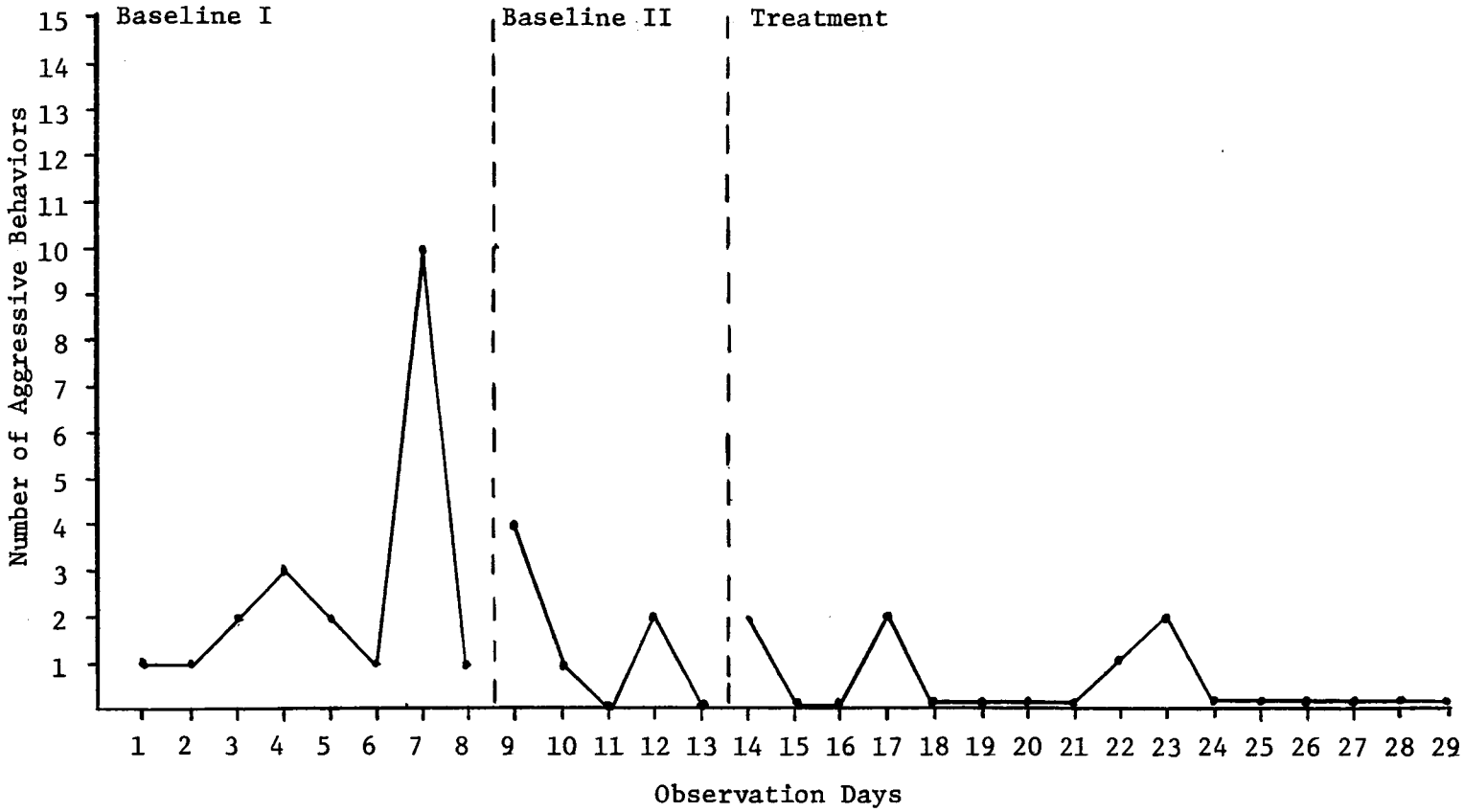

Figure 3.9. Total number of aggressive behaviors each observation day for Subject 7.

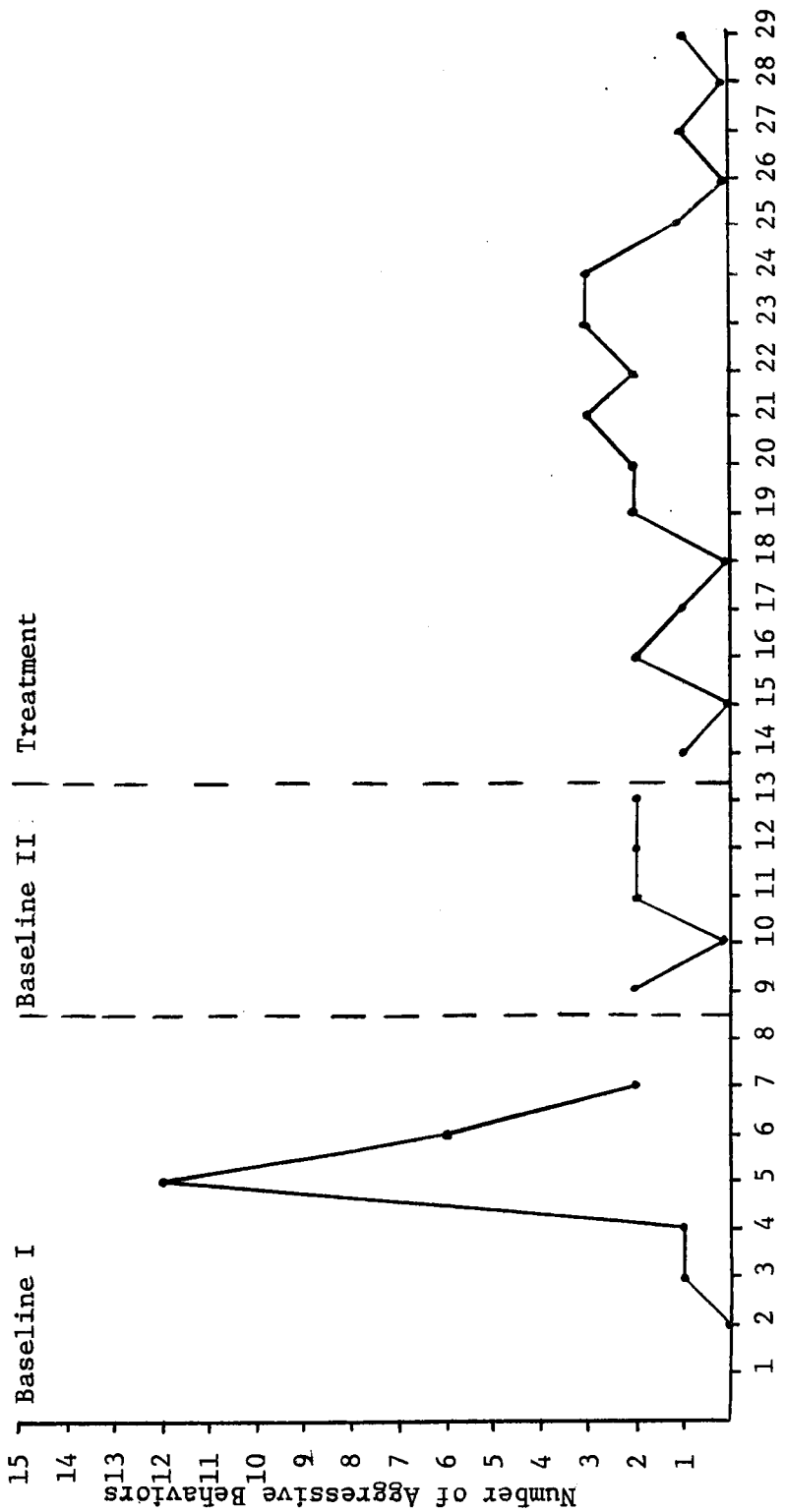

Figure 3.10. Total number of aggressive behaviors each observation day for Subject 8.

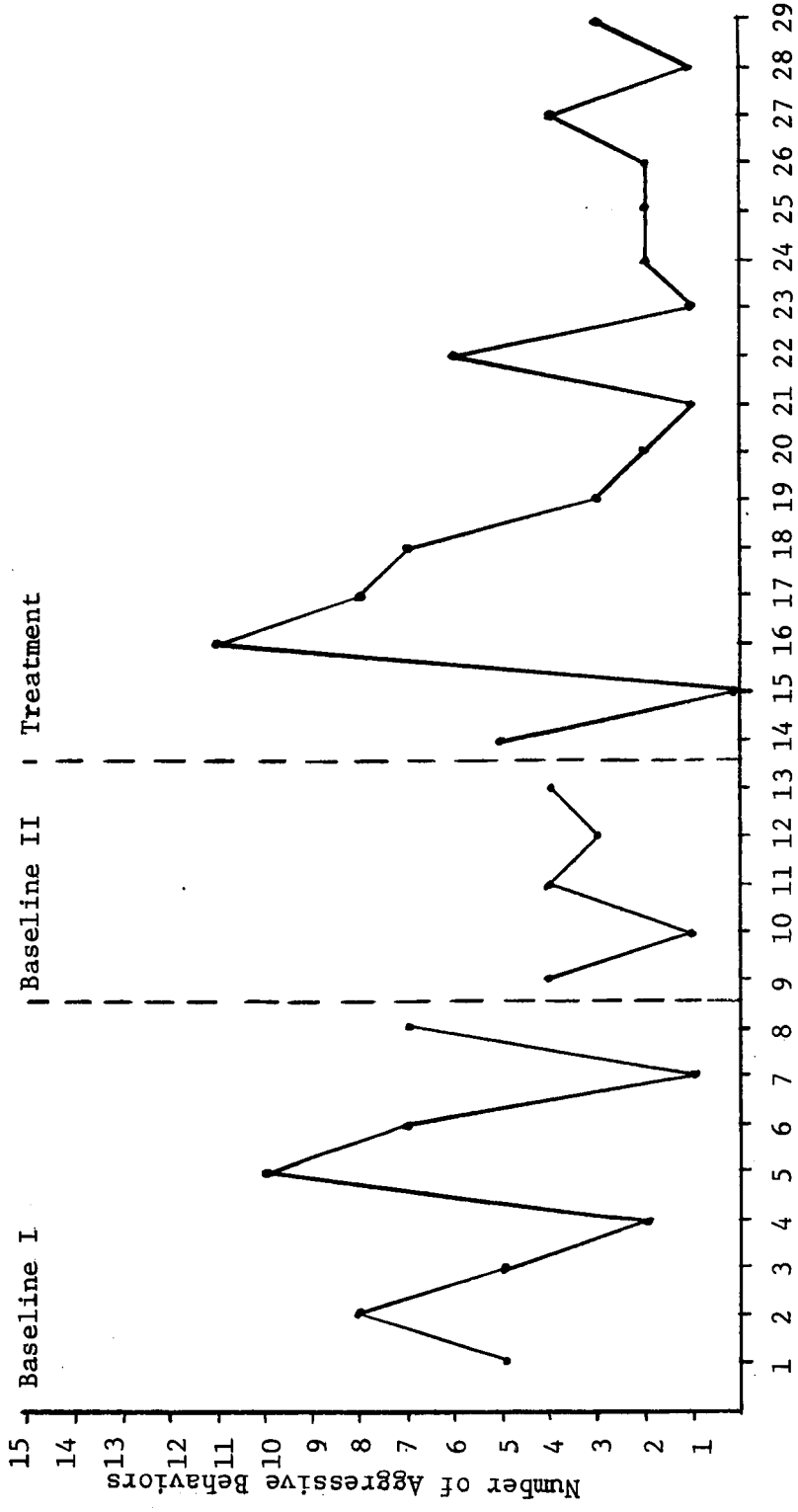

Figure 3.11. Total number of aggressive behaviors each observation day for Subject 9.

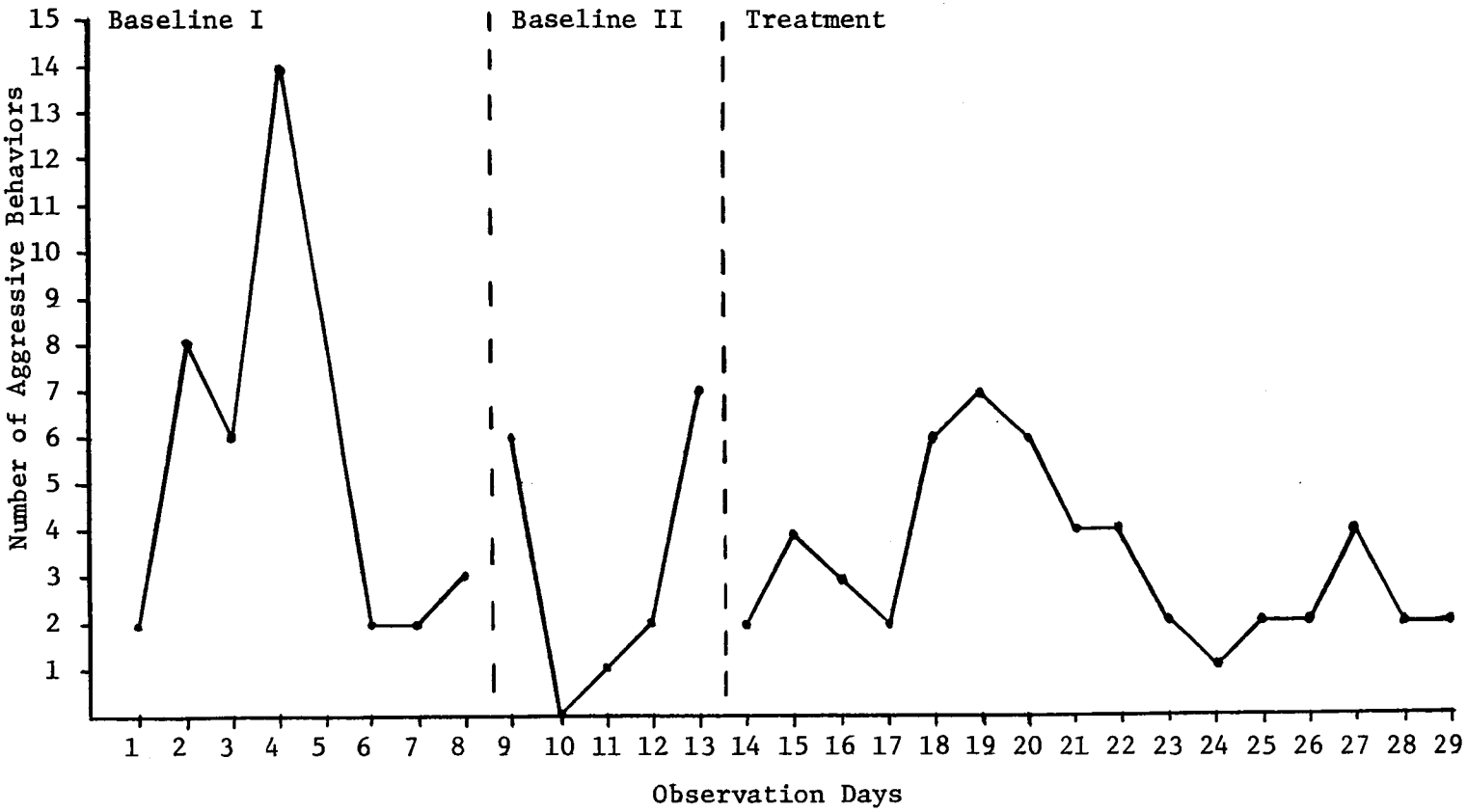

Figure 3.12. Total number of aggressive behaviors each observation day for Subject 10.

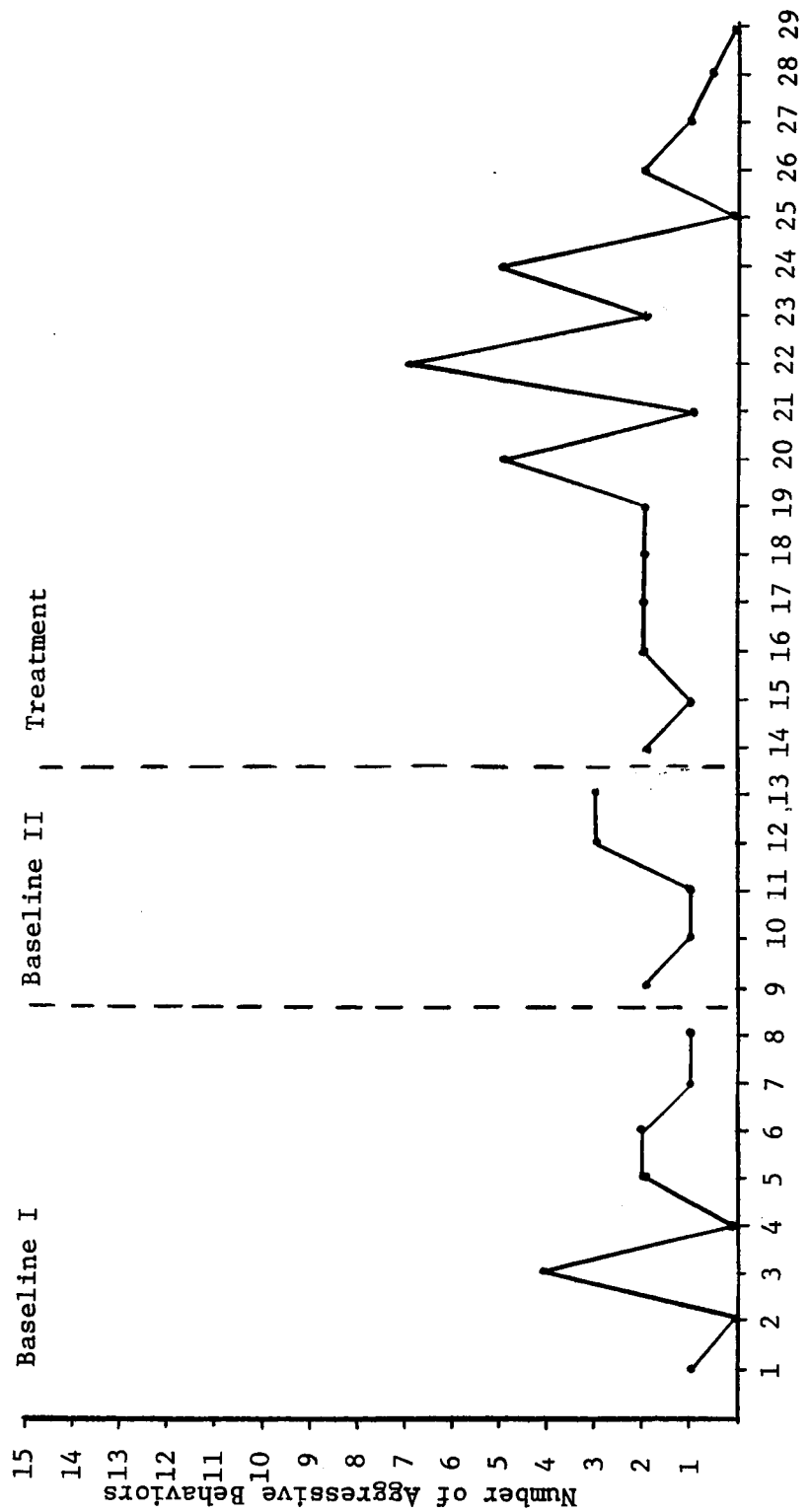

Figure 3.13. Total number of aggressive behaviors each observation day for Subject 11.

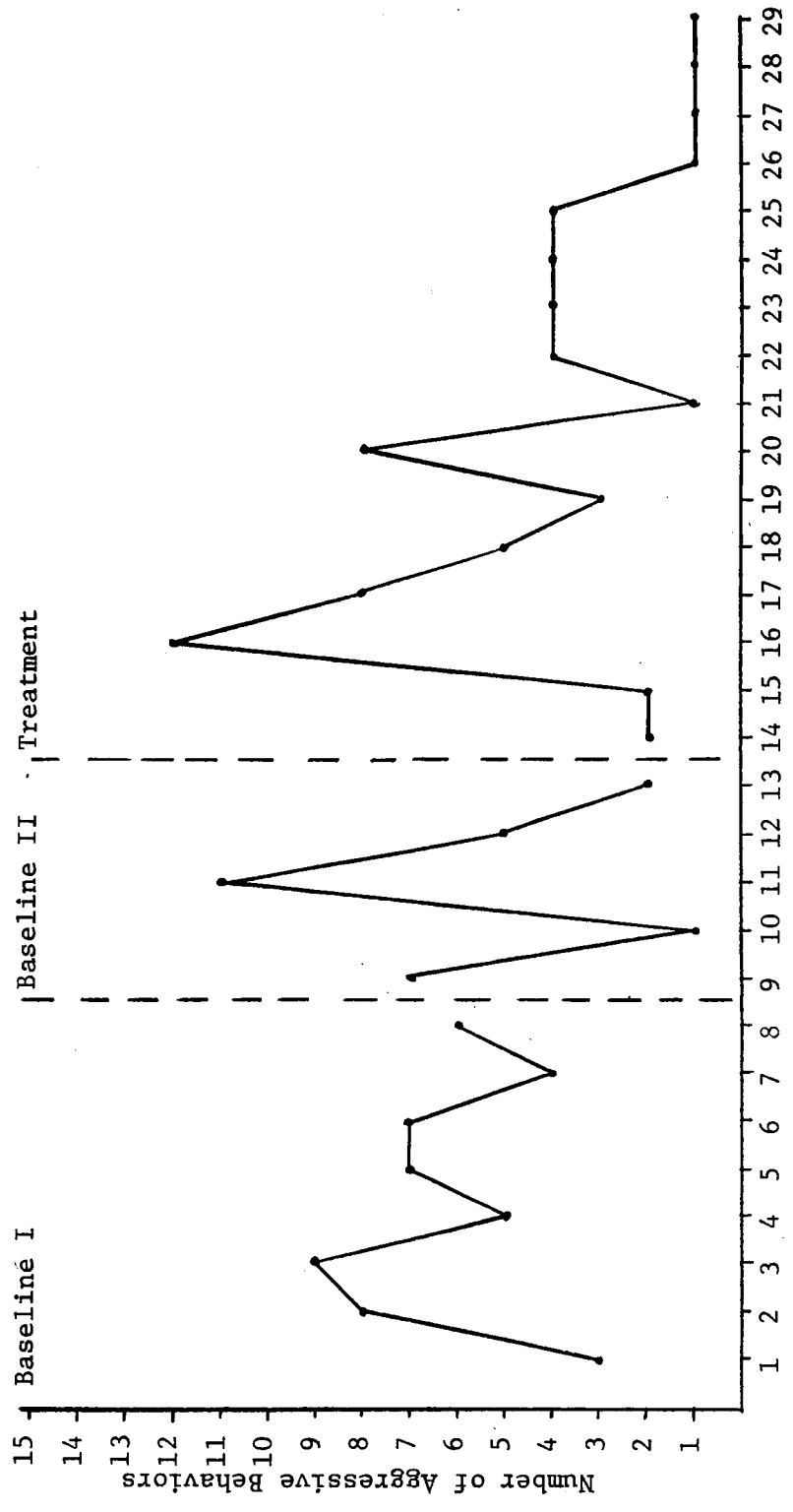

Figure 3.14. Total number of aggressive behaviors each observation day for Subject 12.

each group had a significantly lower self-concept at the time of post treatment administration. In Group I, Subject 3 showed an increase of 14 points. Subject 5 showed a decrease of 11 points. In Group II, Subject 9 showed an increase of 14 points. Subject 11 showed a decrease of 34 points. Table 3.7 shows the pre and post test results and the changes in scores for each subject.

Conclusion. The analysis of the data does not support the hypothesis that the self-concepts of the boys in the assertiveness training program will significantly increase. Only two of the boys showed a significant increase. These increases were offset by the two boys who showed a significant decrease in self-concept.

Correlations Between Teacher Checklists and Behavioral Observations

The data generated by the teacher checklists and the behavioral observations done by the observers were analyzed by computing a Pearson product-moment coefficient of correlation across all conditions. A coefficient of correlation was computed for the group data and for the individual subjects.

The correlation of the teacher checklists and the behavioral observations for Group I, across all conditions, was 0.43, which is significant at the 0.03 level. The teacher generated data were then subjected to t tests across the conditions where significance was found for the observer generated data. The results were not statistically significant: baseline to treatment ($t = -1.76$; $df = 5$, n.s., critical

TABLE 3.7

Pre and Post Test Scores on the CSCS

Subject	Pre Test	Post Test	Change
1	58	60	+2
2	65	73	+8
3	58	72	+14
4	48	52	+4
5	54	43	-11
6	49	56	+7
7	30	34	+4
8	52	52	0
9	50	64	+14
10	61	64	+3
11	52	18	-34
12	58	61	+3

value t = 2.57), baseline to follow-up (t = -2.52, df = 5, n.s., critical value t = 2.57).

For Group II, the correlation across all conditions was 0.21, which is not statistically significant. When the teacher generated data were subjected to a t test across the conditions which resulted in a significant t for the observer generated data, the results were not statistically significant: baseline I to treatment (t = -0.01, df = 5, n.s., critical value t = 2.57).

The correlations across all conditions of the study were significant at the 0.05 level for two of the subjects: Subject 6 ($r = 0.45$, $p < 0.03$) and Subject 11 ($r = 0.41$, $p < 0.05$). Table 3.8 presents the Pearson product-moment coefficient of correlation across all conditions and the level of significance for each computed correlation.

Conclusion. The number of behaviors checked on the teacher checklists do not correlate significantly with the number of direct behavioral observations done by the observers. Therefore, the present data does not support the viability of using a teacher checklist as a reliability check rather than a second observer. Furthermore, the teacher generated data did not show significant changes in the number of aggressive behaviors across conditions even when the changes in the number of aggressive behaviors was significant for the observer generated data.

TABLE 3.8

Pearson Product-Moment Correlations for Teacher Recorded and Observer Recorded Data Across Conditions

Group/Subject	r	p <
Group I	0.43	0.03
1	0.35	0.12
2	0.17	0.43
3	0.36	0.09
4	0.17	0.43
5	0.10	0.63
6	0.45	0.03
Group II	0.21	0.31
7	0.006	0.98
8	0.39	0.06
9	0.06	0.77
10	0.18	0.38
11	0.41	0.05
12	0.07	0.73

CHAPTER IV

DISCUSSION AND CONCLUSIONS

The primary purpose of the study was to examine the effects of group assertiveness training on the aggressive behaviors of fourth grade boys. Hypothesis I predicted that the frequency of aggressive behaviors would decrease as a result of assertiveness training with the level of significance established at the 0.05 level. Overall, the data does not support Hypothesis I.

The analysis of the data for Group I showed that there was a significant decrease in aggressive behaviors across conditions from baseline to treatment ($t = -3.00$, $df = 5$, $p < 0.05$). The significant decrease in behavior maintained itself during the follow-up condition. In fact, the mean number of aggressive behaviors showed a further, but insignificant, decrease in the follow-up condition.

An inspection of the data for individual subjects showed varying decreases in the mean number of aggressive behaviors across conditions from baseline to treatment. All but one of the subjects showed further slight decreases in the mean number of aggressive behaviors from treatment to follow-up. The one exception showed a very slight increase in the mean number of aggressive behaviors from treatment to follow-up.

Overall, the data from Group I and the individual subjects indicates that aggressive behaviors did decrease significantly across conditions from baseline to treatment, and that the decrease in aggressive

behaviors maintained across conditions from treatment to follow-up. However, the data for Group II tempers what can be inferred about a direct causal relationship between the assertiveness training program and the decrease in aggressive behaviors.

The design for Group II included an extended baseline condition (baseline II). The baseline II condition had two purposes: The first was to stagger the start of treatment and control for any effect across time, and the second was to control for attention. The difference in the mean number of aggressive behaviors between baseline I ($\bar{X}$ = 24.0) and baseline II ($\bar{X}$ = 16.4) was a fairly large decrease of 7.6 aggressive behaviors. Although the difference approaches statistical significance at the 0.05 level, it falls short of the criterion ($t = -2.43$, $df = 5$, n.s., critical value $t = 2.57$). Baseline I and baseline II were then combined because the difference between them was not statistically significant. Although the mean number of aggressive behaviors during the combined baseline condition approached statistical significance when compared with the mean number of aggressive behaviors during the treatment condition, it, too, fell short of the criterion at the 0.05 level ($t = -2.32$, $df = 5$, n.s., critical value $t = 2.57$). Significance in the expected direction was obtained when baseline I was compared with the treatment condition ($t = -2.72$, $df = 5$, $p < 0.05$).

Three of the individual subjects in Group II showed a steady decline in the mean number of aggressive behaviors across conditions from baseline I to baseline II to treatment. A decrease in the mean number of aggressive behaviors from baseline I to baseline II, with a

slight increase in aggressive behaviors from baseline II to treatment was shown by two of the subjects. One subject showed a slight, but steady increase in the mean number of aggressive behaviors across conditions.

The continuous decrease in the mean number of aggressive behaviors across conditions for both groups suggests that, perhaps, the decrease was a function of time. However, the decrease in the mean number of aggressive behaviors for Group I from baseline to treatment was 12.32, while the decrease from treatment to follow-up was 2.56. Furthermore, the number of aggressive behaviors during baseline did not show a steady decrease across baseline. Instead, there were slight increases and decreases in the number of aggressive behaviors during the baseline condition. The drop in aggressive behaviors on the last observation day of baseline occurred on the day of the children's Easter party. In addition, it should be noted that the number of aggressive behaviors observed during the first observation day of the treatment condition showed a recovery to a point above the mean of the baseline condition. This was followed by a substantial drop in the number of aggressive behaviors observed during the treatment condition. The drop was maintained on a fairly even level throughout the treatment and follow-up conditions (see Figure 3.1, page 39).

For Group II, the difference in the mean number of aggressive behaviors from baseline I to baseline II was a decrease of 7.6. The decrease from baseline II to treatment was 1.52. The data points for Group II show more of a gradual downward trend than does the data for

Group I. However, after what appears to be a decrease in aggressive behaviors over time during the last four observation days of baseline I, there are a series of increases and decreases in the number of aggressive behaviors observed. Finally, the last seven observation days during the treatment condition show a decrease in aggressive behaviors when compared to the first nine observation days during the treatment condition. The fluctuations in the number of observed aggressive behaviors and the decrease in the mean number of observed aggressive behaviors from baseline I to baseline II do not seem consistent with the gradual decrease that would be expected if the decrease were simply a function of time (see Figure 3.8, page 50).

The largest decrease in aggressive behaviors in both groups occurred when the boys received extra attention. That is, Group I received the group treatment and Group II was exposed to basketball at the start of baseline II. Although some consideration must be given to the explanation that a decrease in aggressive behavior occurred with time, the argument that attention was a stronger factor is a more compelling agrument.

Another compounding variable needs consideration. Although the boys in Group I were all in the same classroom, as were the boys in Group II, the classrooms were teamed. Therefore, the boys had various opportunities to interact and the possibility that the boys in Group I influenced the boys in Group II must be considered.

Although the data for Group II does not support the hypothesis that group assertiveness training will decrease the frequency of

aggressive behaviors and therefore, limits what can be inferred from the data for Group I regarding a direct causal relationship between the assertiveness training program and the decrease in aggressive behaviors, group assertiveness training cannot be ruled out as a procedure for changing aggressive behavior in children. Nine of the twelve subjects showed a decrease in aggression. That is, all six of the subjects in Group I showed a decrease in aggression from baseline to treatment. Three of the subjects in Group II manifested less aggressive behavior in the treatment condition than in either baseline I or baseline II conditions. Nonetheless, more research needs to be done before any definitive statements about the effectiveness of assertiveness training in reducing aggressive behaviors in the classroom can be made.

Further research should focus on eliminating the possibility of interaction effects. This could be accomplished by working with children in classrooms that do not interact. Developing assertiveness training groups in more than one school would certainly eliminate interaction effects. Consideration must also be given to the fact that some of the boys did not exhibit a high frequency of aggressive behavior during baseline, which makes it difficult to demonstrate a significant change.

The effectiveness of assertiveness training for reducing aggressive behaviors in children of various ages needs to be explored. It seems probable that as more alternatives for problem solving are developed at different age levels that aggressive behaviors will receive

less positive reinforcement from peers. Children who utilize aggressive behaviors to accomplish their goal will then have more motivation to adopt alternative styles. The difficulty with abandoning an effective style, such as aggression, is clearly illustrated by an event that took place during the study. A boy pushed into line at the drinking fountain. One of the subjects told the boy that he had been there first and that he should wait his turn like everyone else. The request was ignored. The subject then said that if the offender did not move he was going to hit him. The request was still ignored. Consequently, the subject hit the boy who had pushed into line and the boy went to the back. At the next group meeting the subject said that it was a lot of work using "Speak-up" behavior and that "Bulldozer" behavior worked much better!

The preceding example also suggests a consideration for future research. That is, the method of recording aggressive behaviors should take into account attempts at dealing with interpersonal situations appropriately before resorting to aggressive behavior. In the example cited, the subject not only asked the boy who had pushed in line to wait his turn, but warned him of the consequences if he did not comply with the request. However, the recording system used in the present study makes no allowances for the fact that the subject appropriately asked the boy who had pushed in line to wait his turn. The fact that the subject hit the boy was recorded as a hitting behavior, the same as if the subject had hit him immediately. Thus, the method of recording aggressive behaviors could have obscured qualitative changes in the nature of aggressive responses.

Future research should also include control groups. That is, one group of children could be observed for the duration of the study with no intervention at all. Another group could be involved in a group activity, such as basketball, during the treatment condition. Comparing the results of these two types of control groups with treatment groups would provide further information on the time and attention variables.

The study also addressed whether assertiveness training had any effects on the self-concept of the fourth grade boys who participated in the study. The overall effect was in the hypothesized direction. However, the overall increases in self-concept were not significant and were no greater than would be expected as a function of time or the result of taking the inventory a second time (Piers, 1969).

Eleven of the twelve subjects had a pretreatment score on the CSCS which fell within the average to high range for the standardization sample on the CSCS. It seems unlikely that assertiveness training would significantly increase self-concept scores that were not below average. Although the subjects were engaging in enough aggressive behaviors to have them stand out within their classrooms, the aggressive behaviors of the boys were probably not of the magnitude likely to result in the negative evaluation of self, which is seen as an eventual outcome of aggressive behavior by Alberti and Emmons (1974) and Patterson (1975). Furthermore, it must be taken into account that the subjects were normal boys and were functioning in a regular classroom situation.

It is much more difficult to individually account for the four subjects whose self-concepts did change significantly. Subject 3 showed a significant increase on the CSCS. Interestingly, he probably made the most dramatic reduction in aggressive behavior. Subject 9 also showed a significant increase on the CSCS. However, his behavior showed a lot of variations throughout the study. The mean number of his aggressive behaviors decreased from baseline I to baseline II by 2.4 and increased from baseline II to treatment by 0.55. Piers (1969) points out that it cannot be assumed that high, especially very high scores, truly reflect a positive self-concept. Thus, the possibility exists that the increases are a function of answering in the socially desirable direction or a desire to please the author.

Piers (1969) also points out that it can be assumed that truly low scores reflect a negative self-concept. However, Subject 5, who showed a significant decrease on his CSCS score, told the author he was not feeling worse about things at the end of the program than at the beginning. He added that he answered how he really felt about the questions the second time because after being in the program he was certain he could trust the author. Subject 11 showed a large decrease in his CSCS score. He also showed a slight increase in the mean number of aggressive behaviors across conditions. Subject 7 was the only boy whose pretreatment score on the CSCS was below average. His post treatment score showed a minor increase, but remained below average.

Perhaps the time between pre and post treatment administrations was too short to expect significant increases. However, it seems more

likely that boys whose pretreatment score is average or above average will not show significant increases in self-concept. Another possibility is that more of the boys felt like Subject 5, who was not certain at the time of the pretreatment administration, that he could trust the author. Consequently, any positive changes in self-concept are obscured by inflated pretreatment scores. Answering paper and pencil inventories in the socially desirable direction is a difficult variable to control. It is precisely that type of difficulty that argues for direct behavioral observations to assess the effectiveness of treatment programs whenever possible.

The viability of using a teacher checklist as an alternative to traditional reliability checks using a second observer when studying multiple aggressive behaviors was not supported by the data. The correlations between the teacher generated data and the data generated by the observers were statistically significant for only two of the twelve subjects and for one of the groups. However, a slight modification in the procedure may have resulted in a more favorable outcome. Future research may find more significant correlations if the teachers respond to the checklist for the same time periods during the day in which the observers are recording, rather than having the teachers respond to the checklist over the entire school day.

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APPENDICES

APPENDIX A

TABLE A.1

A Comparison of Nonassertive, Assertive, and Aggressive Behavior*

Item	Nonassertive Behavior	Assertive Behavior	Aggressive Behavior
Characteristics of the behavior	Emotionally dishonest, indirect, self-denying, ihhibited	(Appropriately) emotionally honest, direct, self-enhancing, expressive	(Inappropriately) emotionally honest, direct, self-enhancing at expense of another, expressive
Your feelings when you engage in this behavior	Hurt, anxious at the time and possibly angry later	Confident, self-respecting at the time and later	Righteous, superior, deprecatory at the time and possibly guilty later
The other person's feelings about herself when you engage in this behavior	Guilty or superior	Valued, respected	Hurt, humiliated
The other person's feelings toward you when you engage in this behavior	Irritation, pity, disgust	Generally respect	Angry, vengeful

Modified from Alberti and Emmons (1970).

*An Introduction to Assertive Training for Women, Jakubowski-Spector, 1973, p. 5.

APPENDIX B

SURVEY OF AGGRESSIVE BEHAVIORS

I am considering a dissertation project involving aggressive children. There is a certain amount of preliminary information necessary that I can best obtain from classroom teachers. Therefore, I would appreciate it if you would take a few minutes and answer some questions for me.

For the purpose of my research aggression will include the following behaviors: (1) hitting, (2) poking, (3) pinching, (4) kicking, (5) pulling hair, (6) tripping, (7) pushing or shoving, (8) destroying property, (9) banging objects, (10) statements such as, "I'll get even," "You won't get away with that," "I'll show him," and other expressions of revenge, (11) teasing, (12) screaming or yelling out inappropriately, (13) cursing, (14) blaming others, (15) temper tantrums, and (16) refusing to answer when asked questions.

All children, at sometime, display one or more of these behaviors. Therefore, I am interested in children who regularly display these behaviors at least five times per week.

(1) How many children in your classroom display one or more of these behaviors, in some combination, at least five times per week?

(2) How many of them are boys?

(3) How many of them are girls?

(4) About how many of the twenty behaviors listed as agressive do each of the children engage in?

Thank you for your time and consideration.

/s/ Jeffrey W. Knauss

APPENDIX C

DATA SHEET

TOTAL							
Taking advantage of others							
Refusing to answer							
Temper tantrums							
Blaming others							
Cursing							
Screaming or yelling out inappropriately							
Teasing							
Statements of revenge							
Banging objects Slamming doors							
Destroying property							
Tripping							
Pulling or messing-up hair							
Kicking							
Pinching							
Poking							
Hitting							
DATE: OBSERVER: TIME: NAMES:							COMMENTS:

APPENDIX D

SELF REPORT INVENTORY

1. My classmates make fun of me. . . . . yes no
2. I am a happy person . . . . . yes no
3. It is hard for me to make friends . . . . . yes no
4. I am often sad. . . . . yes no
5. I am smart. . . . . yes no
6. I am shy. . . . . yes no
7. I get nervous when the teacher calls on me. . . . . yes no
8. My looks bother me. . . . . yes no
9. When I grow up, I will be an important person . . . . . yes no
10. I get worried when we have tests in school. . . . . yes no
11. I am unpopular. . . . . yes no
12. I am well behaved in school . . . . . yes no
13. It is usually my fault when something goes wrong. . . . . yes no
14. I cause trouble to my family. . . . . yes no
15. I am strong . . . . . yes no
16. I have good ideas . . . . . yes no
17. I am an important member of my family . . . . . yes no
18. I usually want my own way . . . . . yes no
19. I am good at making things with my hands. . . . . yes no
20. I give up easily. . . . . yes no
21. I am good in my school work. . . . . yes no

22. I do many bad things. . . . . yes no

23. I can draw well . . . . . yes no

24. I am good in music. . . . . yes no

25. I behave badly at home. . . . . yes no

26. I am slow in finishing my school work . . . . . yes no

27. I am an important member of my class. . . . . yes no

28. I am nervous. . . . . yes no

29. I have pretty eyes. . . . . yes no

30. I can give a good report in front of the class. . . . . yes no

31. In school I am a dreamer. . . . . yes no

32. I pick on my brother(s) and sister(s) . . . . . yes no

33. My friends like my ideas. . . . . yes no

34. I often get into trouble. . . . . yes no

35. I am obedient at home . . . . . yes no

36. I am lucky. . . . . yes no

37. I worry a lot . . . . . yes no

38. My parents expect too much of me. . . . . yes no

39. I like being the way I am . . . . . yes no

40. I feel left out of things . . . . . yes no

41. I have nice hair. . . . . yes no

42. I often volunteer in school . . . . . yes no

43. I wish I were different . . . . . yes no

44. I sleep well at night . . . . . yes no

45. I hate school . . . . . yes no

46. I am among the last to be chosen for games. . . . . yes no

47. I am sick a lot . . . . . yes no

48. I am often mean to other people . . . . . yes no

49. My classmates in school think I have good ideas . . . . . yes no

50. I am unhappy. . . . . yes no

51. I have many friends . . . . . yes no

52. I am cheerful . . . . . yes no

53. I am dumb about most things . . . . . yes no

54. I am good looking . . . . . yes no

55. I have lots of pep. . . . . yes no

56. I get into a lot of fights. . . . . yes no

57. I am popular with boys. . . . . yes no

58. People pick on me . . . . . yes no

59. My family is disappointed in me . . . . . yes no

60. I have a pleasant face. . . . . yes no

61. When I try to make something, everything seems to go wrong. yes no

62. I am picked on at home. . . . . yes no

63. I am a leader in games and sports . . . . . yes no

64. I am clumsy . . . . . yes no

65. In games and sports, I watch instead of play. . . . . yes no

66. I forget what I learn . . . . . yes no

67. I am easy to get along with . . . . . yes no

68. I lose my temper easily . . . . . yes no

69. I am popular with girls . . . . . yes no

70. I am a good reader. . . . . yes no

71. I would rather work alone than with a group . . . . . yes no

72. I like my brother (sister). . . . . yes no

73. I have a good figure. . . . . yes no

74. I am often afraid . . . . . yes no

75. I am always dropping or breaking things . . . . . yes no

76. I can be trusted. . . . . yes no

77. I am different from other people. . . . . yes no

78. I think bad thoughts. . . . . yes no

79. I cry easily. . . . . yes no

80. I am a good person. . . . . yes no

APPENDIX E

LETTER TO PARENTS FROM PRINCIPAL

FARRAGUT INTERMEDIATE SCHOOL
11138 Kingston Pike
Knoxville, Tennessee 37922

March 7, 1977

Dear Parents:

An important part of education is research. One function of the schools is to facilitate educational research. We have on our staff Mr. Jeff Knauss, a school psychologist. Mr. Knauss plans to do some research involving a selected number of students here at Farragut Intermediate this spring. He will be observing different types of student behavior.

This investigation will in no way jeopardize your child learning. Your support in this project is appreciated.

Sincerely,

/s/ Robert W. Frazier

Robert W. Frazier, Ed.D.

RWF:wr

APPENDIX F

PARENTAL PERMISSION FORM

Dear Parents:

Your child is being considered as a participant in an assertiveness training program. The purpose of the program is to help children learn to respond to others in socially appropriate ways that will achieve their goals without resorting to aggressive behaviors which are likely to annoy others. It is anticipated that when children learn appropriate social skills that they will feel better about themselves than if they get whatever they want at the expense of others.

To evaluate the effectiveness of the assertiveness training program it will be necessary to directly observe the children participating in the program in the school situation. Observations will be done in a way that will not interfere with the school program. Furthermore, it will not be apparent to the children that they are being observed. In addition, a short inventory designed to look at how the children feel about themselves will be given to the children at the beginning and at the end of the program.

The information collected will be used as part of my doctoral dissertation. However, no names or information will be used that could result in the identification of a particular child. The information will not be discussed with the staff of the school.

The assertiveness training program will last six weeks. The children will meet for one hour twice a week at times that will not interfere with their school work.

The effectiveness of a program such as the one described depends on selecting appropriate participants. Therefore, preliminary observations will be done to more effectively determine if the assertiveness training program is appropriate for a particular child. If it appears that the program seems appropriate for your child, he will be interviewed individually concerning the program and his willingness to participate and you will be notified.

Your permission for your child to participate in the program may be withdrawn at any time. If for some reason you should decide to withdraw permission, your child will not be penalized in any way. If you have questions at any time, feel free to call me. My home telephone number is 588-9535. The program will be supervised by Dr. Donald J.

Dickinson, associate professor, Department of Educational Psychology and Guidance, The University of Tennessee, Knoxville.

Sincerely,

/s/ Jeffrey W. Knauss

Jeffrey W. Knauss

Your signature(s) indicate(s) your permission for your child to be observed and participate in the program described above if it seems likely that the program is appropriate for your child.

Signatur(s):

Date:

APPENDIX G

TABLE G.1

Motives for Our Behavior*

Don't Try Behavior You	Bulldozer Behavior You	Speak Up Behavior You
Deny yourself of fun and good things	Get what you want at the expense of another person	Get your share of fun and good things
Hold back your feelings	Express your feelings by hurting someone else's	Express yourself
Do not achieve your desired goal(s)	Achieve desired goal(s) by hurting others	May achieve your desired goal(s)
Allow others to choose for you	Choose for others	Choose for yourself
Feel hurt, nervous, lonely		Feel good about yourself
Let others put you down	Put others down	Treat others fairly

*Intervention Strategies with Sixth Graders: A Community Research Project, Lollar, Korn and Haddle, 1976, p. 16.

APPENDIX H

BULLDOZER BEHAVIOR CHECKLIST

NAME:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
Yelling Out						
Lying (Excuses)						
Calling Names (Teasing)						
Blaming Others						
Cursing						
Choosing for Others						
Talking Back						
Bragging						
Banging Things						
Pulling Hair						
Spitting						
Tripping						
Kicking						
Pushing						
Pinching						
Biting						
Hitting						

VITA

Jeffrey William Knauss was born in Allentown, Pennsylvania on July 20, 1946. He attended the Allentown public schools and graduated from William Allen High School in June, 1964. He attended Muhlenberg College in Allentown and received his Bachelor of Arts degree in Psychology in June, 1968.

Following graduation, he accepted employment with the psychology department at the State Correctional Institution at Graterford, Pennsylvania. In May, 1972, he received his Master of Education degree in Counseling from West Chester State College in West Chester, Pennsylvania. He was named Chief of Psychological Services at Graterford following the awarding of his degree.

The author also worked as Director of Counseling at Lehigh Valley Opportunities Center, a half-way house for former prison inmates in Bethlehem, Pennsylvania. He also worked as a diagnostician at Lehigh Valley Drug and Alcohol Abuse Services in Allentown, Pennsylvania.

He began his Doctoral program at the University of Tennessee, Knoxville in June, 1974. He received a teaching assistantship for 1974-75 in the Department of Educational Psychology and Guidance. From 1975-77 he did an internship in school psychology with the Knox County Schools. The Doctor of Education degree with a major in Educational Psychology and Guidance was awarded in August, 1977.

He is married to Susanne M. Jenne of Allentown, Pennsylvania.