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The influence of teaching techniques on the aggressive behavior of four-year-olds.

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THE INFLUENCE OF TEACHING TECHNIQUES ON THE AGGRESSIVE BEHAVIOR OF FOUR-YEAR-OLDS

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CHAPTER I

INTRODUCTION

The problem.-- Aggressive behavior and methods of dealing with it are subjects of universal concern to those engaged in the education of the very young. Teachers, who are otherwise very skillful, often have little understanding of the aggressive behavior of children and of suitable techniques for dealing with it. To many teachers, hostility and its expression in aggressive behavior, is a thing to be condemned, repressed or even denied. These teachers expend their energies in an effort to eliminate all outward signs of aggression or conflict behavior in their classrooms. Other teachers go to the opposite extreme, give no guidance at all and allow full expression to children's aggressive impulses. Parents show the same confusion too; fluctuating from those who are over-restrictive to those who are over-permissive. Nursery-school teachers, particularly, need to know more about how to treat the aggressive behavior of young children, because pre-school age children are most likely to be overt in the expression of their aggressive impulses; having, as yet, developed few controls of their own.

Author's interest in the subject.-- The author has been interested in this subject for many years, both from the point

of view of a nursery-school teacher and that of a parent. The author has both brought up and taught children during each of the extreme periods of theories of child development; the period of rigid schedules, the period of complete freedom of expression, and finally the middle course. The question of how to handle the aggressive behavior of children has been a deep concern for many years. Regardless of the theory popular at the time, it never seemed wholeheartedly wise, either to repress aggressive behavior or to allow it complete freedom of expression. This study stems from the author's attempt to gain a broader understanding of methods of treating children's aggressive behavior and to formulate a working philosophy to serve her in her role as nursery-school teacher and parent of three children.

The purpose of this study is to test the effectiveness of teaching techniques on the aggressive behavior of four-year-olds in the nursery school. The experiment, carried on by the method of direct observation, concerns itself with only the anti-social types of aggressive acts directed against other children or their activities.

Basis for establishing the criteria for this investigation.-- Twelve years of nursery-school teaching, fifteen years of parenthood, critical observations of children's aggressive behavior, two psychiatric seminars on children's emotions, intensive reading and thought on the subject, form the basis of establishing the criteria for this investigation.

CHAPTER II

LITERATURE IN THE FIELD

1. Some Opinions on the Subject

Aggression in general.-- A serious consideration of any of the problems of human growth and development must take into account the processes associated with the emotional reactions of the child. Much has been written about the emotional behavior of children. The emotions have been described as highly stirred-up states of the organism and have been said to "....represent nature's provision for the motivation of behavior...."[1] Aggression can be classified as one of the stronger manifestations of emotional behavior. The term itself is one of considerable breadth. According to Symonds,[2] the term aggression has four distinct meanings:

> "....self-assertiveness and vigor of movement.... an act of hostility with the intention of attack and destruction....to gain possession of a person or an object....to gain control or dominance or management of another person...."

Menninger[3] says: "The problem of life is the problem of con-

1/Louis P. Thorpe, Child Psychology and Development, The Ronald Press Company, New York, 1946, p. 366.

2/Percival M. Symonds, "Aggression," Encyclopedia of Child Guidance, The Philosophical Library, New York, 1943, p. 11.

3/Karl Menninger, Love Against Hate, Harcourt, Brace and Company, New York, 1942, p. 190.

trolling and directing aggressions."

Constructive aspects of aggression.-- Although aggression is usually thought of as an undesirable quality and the word is often used only in its negative sense, it is important to remember that the positive influences of aggression play a significant part in the development of personality. A personality with no aggressiveness in it does not function well in our particular society. Aggression is an important ingredient in the development of leadership and is the basis of many of the worthwhile accomplishments of man. Aggression in its broader sense can be constructive and a motivating force toward progress and fruitful accomplishment.

Contribution to personality structure.-- Babies and young infants are not usually thought of in terms of aggression; but beginning in the earliest stages of development and continuing throughout life, aggression is an element of considerable value in the process of growth and learning. Symonds[1] sees aggression as essential for growth. He says:

> "Children can only learn to separate themselves from their parents by slow degrees, by putting forth aggressive energy and acting independently and by reacting to parents with a certain degree of opposition."

Stephen[2] emphasizes the importance of the aggressive impulses when they are used by the child in helping to defend himself

1/Op. cit., p. 11.

2/Karin Stephen, "Aggression in Early Childhood," British Journal of Medical Psychology (1939), 18:189

and to secure satisfaction of his needs and desires. He says:

> "....in the face of frustration or privation a child reacts with rage and aggression, and this reaction has a useful function to perform if it is directed either towards attacking and getting rid of the source of pain or towards getting mastery over the desired and frustrating object. From this it would follow that aggression is essential for successful living, and that we should be entirely misguided if we aimed at eradicating it, which is just as well since the task would certainly be beyond us."

Frustration and aggression.-- It is generally believed that frustration normally leads to aggression. According to Symonds[1] there are three kinds of frustration that lead to aggression. They are deprivation or unfulfilled desire, interference or restriction of activity and attack from without threatening harm, pain or some kind of discomfort. He says:

> "....aggression is the most primitive and universal response to frustration....aggression has two main functions: 1 to wrest satisfactions from the outside world, and 2 to destroy the source of pain...."

Dollard[2] has made a very thorough study of frustration and its relation to aggression. He calls it the frustration-aggression hypothesis and in his work, aggression, frustration and their relationships are defined. He defines aggression as:

> "....an act whose goal-response is injury to an organism (or organism-surrogate)....that response, which follows frustration, reduces only the secondary, frustration-produced instigation, and leaves the strength of the original instigation unaffected."

1/Ibid., p. 11.

2/John Dollard, Leonard W. Doob, Neal E. Miller, O. H. Mowrer, Robert R. Sears, Frustration and Aggression, Yale University Press, New Haven, 1939, p. 11.

Frustration, he defines as "....that condition which exists when a goal-response suffers interference."[1/] He found that the amount of frustration directly influences the strength of instigation to aggression and that the inhibition of acts of direct aggression constitutes an additional frustration, which in turn instigates aggression against the inhibitor. Aggression, then, tends to be displaced to other objects and expressed in modified form. Sublimation is a socially approved modification.

From this study, it can be deduced that aggression is a necessary consequence of frustration. However, the consequential aggression may take many forms of expression. The expression may be direct, overt and an obvious reaction to the frustration involved; or if the inhibition to the direct act of aggression is too great, the expression may become displaced from one object to another, changed in form or in extreme cases, turned back against the self. A thoughtful examination of the material of this study, strongly suggests that expression of aggression, in one way or another, is necessary when frustration presents itself. It also suggests the therapeutic value of the aggressive act in releasing the emotional tension that is caused by frustration. Aggression is thus portrayed as an aid, helpful in defending the personality from the anxiety which would inevitably result from unreleased frustration.

1/John Dollard, op. cit., p. 11.

Stephen[1] speaks of the dangers of unreleased frustration, saying:

> "....what is really disruptive is not passion itself but impotent passion, passion which is inhibited and frustrated so that it cannot be discharged in a smoothly co-ordinated way."

Effects on physical health.-- Teagarden[2] describes the effects of violent emotion upon the autonomic nervous system. Strong emotions and the thoracicolumbar division of the autonomic nervous system prepare the body for the strains and the stresses of emergencies. The effects of strong emotion on the heart, stomach and other organs, may be felt for a long time afterward. She states that:

> "....a child who is allowed to grow up having constant fits of anger and rage, or suffering debilitating fears all the time will have his thoracicolumbar system 'in gear' far too frequently. Such a child will suffer not only from the standpoint of social acceptance and mental hygiene, but also from the standpoint of physical health."

Anti-social aggression in young children.-- Throughout the literature concerning itself with the development of the pre-school age child, there seems to be a universal acceptance of the normality of aggressive behavior among children of this age. Isaacs[3] sees it as representing quite a definite stage in social development and believes that aggres-

1/Op. cit., p. 182.

2/Florence M. Teagarden, Child Psychology for Professional Workers, Prentice-Hall, Inc., New York, 1946, p. 311.

3/Susan Isaacs, Social Development in Young Children, Harcourt, Brace and Company, New York, 1937, p. 231, 232.

sive behavior contributes to a greater freedom of feeling and action, indicating that the child is less inhibited by anxiety. Murphy,[1] in her intensive studies on sympathy in young children, found a definite correlation to exist between sympathetic and aggressive behavior in children. Children who scored high in sympathy records also exhibited considerable unsympathetic behavior and scored high in aggression. She also found that both aggressive and friendly responses increase with age during the pre-school years. Isaacs[2] describes the aggressive behavior of young children vividly:

> "The group relations of children under seven are unstable, not because their goodwill for each other is weak, but because their hostility is equally strong.... They love and they hate with an equal simplicity and wholeheartedness, and they may pass in a moment from fondness to anger, from co-operation to quarrels and tears. They have not yet learned to select their impulses along the lines of congenial friendships and selected loyalties."

Part of the socialization process.-- All of this seems to bear out the same general theory that children of pre-school age are quick to love and equally quick to hate in their relationships with one another. However, neither the depth of their love nor the intensity of their hate is in any way comparable to the adult expression of these emotions. Rather, it is impulsive, quite brief and more often than not, a part of the socialization process of the young child. Young

1/Lois Barclay Murphy, Social Behavior and Child Personality, Columbia University Press, New York, 1937.

2/Susan Isaacs, The Children We Teach, University of London Press, Ltd., 1937, p. 91.

children lack experience in handling themselves in social situations and are likely to be quite primitive in their reactions to the normal give and take of group play. Carmichael[1] agrees with Isaacs[2] that aggressive behavior is a normal part of the socialization process of young children. He says:

> "....such aggressive behavior frequently is mild in nature and arises as an incidental feature of the child's general activity as he moves about, explores his environment, interferes with others, or seeks to obtain their material or to protect his own possessions. Occasionally a child's anger is aroused when he is rebuffed by other children whose play he tries to join....Fighting and bickering, usually of a relatively mild sort, are likely to occur most frequently in the relations of children who associate with each other a good deal and whose relationship with one another is predominantly of a friendly sort. The child who is most active socially and who is most versatile in his social contacts is also likely to get into a larger number of situations in which controversy may arise than is a child who is less enterprising."

Correlation of aggression to the general activity of the child.-- Jersild[3] sees aggression as correlated to a high degree with the general activity of the child and pictures it as a normal part of the social friendly intercourse among young children. He observes that aggression against another child may serve many purposes, both friendly and unfriendly. He also notes that many of the conflicts of pre-school children center about protecting or procuring play materials, and this is due

1/Leonard Carmichael, Manual of Child Psychology, John Wiley and Sons, Inc., New York, 1946, p. 772.

2/Op. cit.

3/Arthur T. Jersild, Child Psychology, Prentice-Hall, Inc., New York, 1940.

to the fact that ideas involving property rights and sharing and taking turns have not yet been formed. Jersild[1] also comments, as do several other writers, on the confusion that must arise in the minds of children, when they are strongly admonished by their parents never to hit or fight, but they find that in their play group, membership status precludes a certain amount of hitting and fighting in order to be 'respectably' accepted. Moreover, there is the problem of when aggressive action is justifiable, as in the case of self-defense. Many writers have concerned themselves with a discussion of this problem and Jersild[1] states:

> "....if the child is a sociable creature, occassions are bound to arise when he is practically forced to defend his interests and his rights. If the child does not rise to his own defense, he practically is denied the freedom to share and enjoy the social contacts and opportunities afforded by the group situation....an adult's abstract moral stand against aggression may be splendid as a general rule of conduct and yet may be artificial and needlessly rigid when brought to bear against the normal little tussles which arise in the social relations of young children. Training in morals and good conduct should proceed with due regard for the abilities and problems of children at different stages of their growth."

Explosion of energies theory.-- Wolff[2] approaches the subject of aggression in the young child from another point of view and sees the aggression of the young child as an explosion of his energies. He says:

> "The behavior of aggression has a different significance in the preschool child and in the adult. Aggres-

1/Op. cit., p. 403

2/Werner Wolff, The Personality of the Preschool Child, Grune and Stratton, New York, 1946, p. 40.

> sion in the adult is the direction of energies of the adult's self against non-selves; but the child, for whom the self and non-self are not yet differentiated, does not direct his aggressiveness. The aggressiveness of the young child is an explosion of his energies, as is the case with his other bodily functions....The child attacking another person is not interested in the reaction of that person, but in the experience of his own explosion."

This particular theory would seem to be illustrated by the large number of incidents observable in the aggressive acts of children of pre-school age, where it seems that the child treats the victim of his aggression more like an inanimate object than like another person. It is possible that his seeming lack of concern at such times, stems from the very nature of his childish explosive aggressiveness.

The role of education.-- Many statements appear concerning the value of educational processes, in the treatment of anti-social aggression in young children. Symonds[1/] states:

> "The solution of the problem of destructive aggression rests mainly with education, for it is only through education that aggressiveness can be turned into constructive channels."

The nursery school can serve a most useful purpose by providing ample opportunities for active play and the working off of aggressive tendencies through social play under the skillful guidance of understanding teachers. In our culture, it is a recognized fact that a certain amount of personal combat and destructiveness is a wholesome ingredient of the social

1/Ibid., p. 11.

play of young children. This serves as a relief or acts as a safety valve, draining off the aggressive feelings of the growing child. Hartley[1] speaks of the values for the child, to be gained from dramatic play, saying: "dramatic play can theoretically offset some of the inevitable frustrations of life and help him adapt to the real world." Children can work out and work through their aggressions through dramatic play and thereby come to understand them better. Play of this kind is strongly influenced by the child's dominant need to grow up.

Teaching socially useful techniques and providing acceptable outlets for aggression.-- One of the functions of education is represented to be that of channeling aggression and providing socially acceptable methods of expression for the aggressive feelings of children. Menninger[2] speaks of children's need to be taught socially useful techniques. He says:

> "Children don't need to be taught that they are aggressive or that other people are aggressive; they need to be taught the techniques whereby these aggressions can be disposed of....Under the benevolent influence of a teacher whose fairness and friendliness and affection for her children are unclouded by confusion or resentment of her role, the child has not only a model but a technique for mastering aggressions or directing them fruitfully ....the child's motive in learning is based upon certain instinctual needs....the need for exchanging love with other human beings and the need for expressing in socially approved ways the aggressive tendencies."

1/Ruth E. Hartley, Lawrence K. Frank, Robert M. Goldenson, Understanding Children's Play, Columbia University Press, New York, 1952, p. 19.

2/Op. cit., p. 251, 247.

Bacmeister[1] calls aggression a strong ego urge and suggests that teachers work especially toward providing socially acceptable outlets for it and toward building up positive social satisfactions to balance it. Among the acceptable outlets, she suggests turning the child's aggressive feelings against inanimate objects, and suggests pounding the clay, punching the punching bag and spanking the dolls. Her description of the release of feelings, both hostile and pleasant, through the medium of expression of the creative arts and music is one to be seriously considered by the nursery-school teacher, because young children are not always able to talk out their feelings the way an adult can. Through painting, a child can release and discharge deep feelings that he could not possibly express in words. After the use of such artistic outlets, children often seem in a better mood.

Bacmeister,[1] along with others, also believes that the young child needs education in social skills and in the handling of his aggressive impulses. She says:

> "....he will need teaching. 'Please' and 'thank you' will help him with adults. Taking turns, sharing, exchanging(and persuading others to do the same) will get him further with the children. He can learn to get satisfaction from helping other children and win their help when he wants it, to cooperate and to lead, as well as to keep hands off and let them alone if they prefer....Basically the problem is learning to like and respect them as people, and to consider their wishes. That is not easy.
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> The world and youngsters being what they are, a child

1/Rhoda W. Bacmeister, Your Child and Other People, Little, Brown and Company, Boston, 1950, p. 221.

> also needs to learn how to meet aggression and to defend himself and his rights when necessary. Part of it is instinctive, but there are skills involved too. One needs not only courage, a good healthy resentment of injury, and some knowledge of the manly art of self-defense, but an idea of where to draw the line. There have to be limits on what one may use as a weapon (teeth? rakes?) and other concepts of what constitutes a fair fight."

The role of the nursery-school teacher.-- The role of the nursery-school teacher assumes considerable importance in the treatment of aggressive behavior. The teacher provides for this both in the planning of the nursery school environment and in her consideration of the various techniques to be used in the treatment of aggressive behavior. She needs considerable insight into the personality development of young children and must formulate for herself a thoughtful and dynamic philosophy of discipline, commensurate with the growth needs of young children. She must be "tolerant and accepting of a child and yet plan for a child's growth in more mature directions."[1/] She must have a capacity for warm and meaningful relationships with other people and possess sufficient emotional maturity for appreciating and understanding other people for their intrinsic value. Freud[2/] says that teachers should endeavor to find a middle course somewhere between

1/Percival M. Symonds, The Dynamics of Parent-Child Relationships, Bureau of Publications Teachers College, Columbia University, New York, 1949, p. 111.

2/Anna Freud, "Psychoanalysis and the Training of the Young Child," The Psychoanalytic Quarterly, New York (January 1935), 14:15.

repression and the full expression of aggression. She states:

> "The instinctual urge must not be driven into repression, thus preventing its sublimation, i.e., its diversion into other and acceptable channels, nor must it be allowed full satisfaction....The path to mental health lies somewhere between these two extremes."

An excellent description of the role of the nursery-school teacher in the treatment of aggressive behavior is to be found in the 1950 Yearbook[1] where they state:

> "By and large, feelings must be expressed if we are going to learn ways of dealing with them that are satisfying to the individual and acceptable to the groups in which he lives....recognition of inner and outer reality is shown by the good nursery-school teacher. She does not say to Johnny as he raises a shovel to strike Susan, 'don't do that; that's bad.' She is likely to say something of this sort: 'I know you are angry at Susan because she knocked down your sandhouse. But you can't hit Susan. It would hurt her. Come with me and we will find some nails and wood; we can pound them into the wood over there at that work bench.' This teacher has acted in an effective way. She has recognized and accepted the feeling; it is real and, in that sense, valid. She has set social limits and given reasons for those limits. She has offered a socially acceptable way of releasing tensions."

Combination of education and maturation.-- The nursery-school teacher must not only concern herself with techniques for guidance, but must also be mindful of the inner forces of growth and maturation, and the readiness to learn. Reynolds[2] speaks of this, when she describes the difficulties that children experience in learning to get along with each other. She

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1/Association for Supervision and Curriculum Development, Fostering Mental Health in our Schools, (1950 Yearbook), National Education Association, Washington, D.C., p. 7.

2/Martha May Reynolds, Children from Seed to Saplings, McGraw-Hill Book Company, Inc., New York, 1951, p. 92.

describes it as a complicated process, involving an understanding of the rights and feelings of others. She speaks of the social techniques of children as crude, their language as meager and their experiences as limited. She says:[1]

> "How much this is due to training and how much to inner growth of muscles and brain and nerve connections we do not know, but undoubtedly each contributes its share. It would be of no use to try to make year-old babies play nicely together; they are not sufficiently developed to learn this from even the most skillful teacher, and, on the other hand maturation alone will not accomplish it. It takes the right combination of these two to develop the ability to make satisfying social relations."

Discipline.-- The literature on discipline bears a relationship to this study because this study is concerned with the effectiveness of the techniques used by nursery-school teachers in the treatment of aggressive behavior. Discipline is essentially treatment and in its derivatory sense may be thought of as 'treatment suited to a learner'[2] coming from the Latin origins of the component parts of the word.

To many people, the term discipline has become confused in meaning and erroneously considered synonymous with the term punishment. Punishment involves inflicting a penalty for an offense and has a distinct element of revenge in it.[3] Blatz calls discipline "a plan of training, not, as is usually im-

1/Martha May Reynolds, op. cit., p. 92.

2/Abigail A. Eliot, Lecture on Child Psychology, Boston University, January 3, 1951.

3/William E. Blatz, Understanding the Young Child, William Morrow and Company, New York, 1944, p. 57.

plied, a system of chastisement." Rexford[1] sees discipline as "training the child in a desirable adaptation to reality." She believes that controls need to be put up, not only to protect other children and adults, but also to help the child learn to manage his own feelings, his wishes and his impulses.

Washburn[2] believes that children need to know two certainties in their relationships with disciplining adults. The first is that the adult will be consistent and just. The second has to do with unconditional love; the fact that the child needs to know that the disciplining adult does not love him any less, even though she disapproves of what he has done. The philosophy of unconditional love, as an important factor in discipline, is also outlined by Frank[3] who says:

> "What you really want to do in your discipline is a. to show the child clearly that some acts are not wise, not helpful, not what 'we' do and b. to show or tell him that you can go on respecting and admiring and loving him all the time....Discipline can help the child be clear about what is permitted and what is not. You make a child emotionally stronger when you give him the feeling that there are social rules, necessary rules....omit the terms bad or naughty....you can make the child understand that although what he did was not acceptable, he himself was not 'bad' or 'naughty'. Also, by ruling out terms such as 'bad boy' 'bad girl', you don't give the child a picture of himself as all 'bad'....parents help the child to build up an image of himself. If time after time he is told that he is a 'bad boy', then he may begin to get a rather gloomy picture of himself."

1/Dr. Eveolene Rexford, Seminar on Children's Emotions, The Douglas Thom Clinic, Boston, Massachusetts, March 1951.

2/Ruth Wendell Washburn, Children Know Their Friends, William Morrow and Company, New York, 1949, p. 35.

3/Mary and Lawrence K. Frank, How to Help Your Child in School, The Viking Press, New York, 1950, p. 24, 25.

Baruch[1] has made one of the most recent contributions to the literature on discipline. She presents a new philosophy of discipline, in which she recommends accepting the child's feelings, both good and bad, and mirroring them. She says:

> "When we fail to help a child release his feelings, when we handle him so that he denies them and pushes them into his unconscious mind, they move out of his control. He becomes blind to them. He can no longer see them. He can do nothing about them....Self-control lies in the other direction. It lies in keeping the 'bad' feelings in the open until they work themselves out. It lies in helping children learn to direct their feelings into unhurtful and harmless channels. Learning to channelize is learning to control. For then they steer their feelings. Then they do control their emotions. By directing the type of expression; not be denying what exists."

Generalized opinions on aggression.-- There seems to be a universal acceptance of the normality of aggressive behavior among children of pre-school age. Many writers consider it an important part of the socialization process; correlated to the general activity of the child, as a normal part of the social friendly intercourse among young children.

Even in its anti-social sense, aggression is generally conceded to be a normal component of the personality of the pre-school age child. However, if aggression is to be considered as a valuable tool in personality growth and adjustment; it is essential that educators endeavor, not only to understand, but also to constructively guide children in socially acceptable methods of expression of their aggressive feelings.

1/Dorothy Walter Baruch, New Ways in Discipline, Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1949, p. 71,72.

2. Research Studies on Aggressive Behavior

Aggressive behavior.-- Some research has been done on the subject of anti-social aggression in four-year-old children in the nursery school. Most of this research centers around quantitative and qualitative analyses of acts of anti-social aggression and the conflicts or quarrels of children of nursery school age. The primary concern of the investigators has been either the attitudes of young children toward their aggressive feelings and behavior or an investigation of the amount and intensity of conflict behavior among children of this age; its relation to age, sex, or environmental differences.

Purposes of investigations.-- One of the earliest pieces of research on the subject was made by Goodenough[1/] in an attempt to discover the frequency, duration, causes and methods of handling anger outbursts among children in the home. Green[2/] conducted an investigation in order to determine the relative roles of group play and quarreling in the socialization process, to study age and sex differences, and to analyze the types of play in which quarrels arise. Caille[3/] made a study of

1/Florence L. Goodenough, Anger in Young Children, Institute of Child Welfare, Monograph Series Number 9, The University of Minnesota Press, Minneapolis, 1931.

2/Elise Hart Green, "Friendships and Quarrels among Preschool Children," Child Development (1933), 4:237-252.

3/Ruth Kennedy Caille, Resistant Behavior of Preschool Children, Child Development Monographs Number 11, Bureau of Publications, Teachers College Columbia University, New York, 1933.

resistance in the pre-school child in order to investigate the immediate causes, types of responses, and general situations surrounding resistance. Dawe[1] analyzed 200 quarrels of pre-school children, with the aim of studying and analyzing them as they arose spontaneously in a relatively uncontrolled social environment. Jersild and Markey[2] made a study for the purpose of recording and analyzing aggressive, resistant and hostile acts, as exhibited by children in their dealings with one another. Hattwick[3] studied 60 behavior items in nursery-school children to determine sex differences in behavior. Hattwick[4] also conducted an investigation to determine the influence of nursery school attendance upon the behavior and personality of the young child. Roff and Roff[5] analyzed the variance of conflict behavior in pre-school

1/Helen C. Dawe, "An Analysis of Two Hundred Quarrels of Preschool Children," Child Development (1934), 5:139-157.

2/Arthur T. Jersild and Frances V. Markey, Conflicts between Preschool Children, Child Development Monographs, Number 21, Bureau of Publications, Teachers College Columbia University, New York, 1935, pp. 1-180.

3/LaBerta A. Hattwick, "Sex Differences in Behavior of Nursery School Children," Child Development (December,1937), 8:343-355.

4/Berta Weiss Hattwick, "The Influence of Nursery School Attendance upon the Behavior and Personality of the Pre-school Child," The Journal of Experimental Education (1937),5:180-190.

5/Merrill Roff and Louise Roff, "An Analysis of the Variance of Conflict Behavior in Preschool Children," Child Development, (1940), 11:43-60.

children. Fite[1] made a study of children's attitudes toward physical aggression as they were seen to develope in and through their social life in nursery school. Baruch[2] carried on an investigation in order to gain insight into the lives and emotions of nursery-school children. Appel[3] made a study of the aggressive behavior of nursery-school children and of teachers' methods of dealing with this behavior. Muste and Sharpe[4] investigated pre-school children from two American environments in order to discover the possible relationships between factors of age, sex, gross environmental differences on the one hand and the frequency and types of aggressive behavior, the techniques of response to aggression on the other hand. Curwood[5] studied the techniques of the nursery-school teacher in establishing good social relations in a group of three-year-old children in a nursery school situation.

1/Mary Delafield Fite, Aggressive Behavior in Young Children and Children's Attitudes toward Aggression, Genetic Psychology Monographs, The Journal Press, Provincetown, Massachusetts, (1940), 22:151-319.

2/Dorothy W. Baruch, "Aggression During Doll Play in a Preschool," The American Journal of Orthopsychiatry (April, 1941), 11:252-259.

3/Madeleine Hunt Appel, "Aggressive Behavior of Nursery School Children and Adult Procedures in Dealing with such Behavior," Journal of Experimental Education (December, 1942), 11:185-199.

4/Myra J. Muste and Doris F. Sharpe, "Some Influential Factors in the Determination of Aggressive Behavior in Preschool Children," Child Development (1947), 18:11-28.

5/Sarah T. Curwood, Social Relations of Three Year Old Children in a Nursery School, Unpublished masters thesis, Boston University School of Education, 1947.

Goodman[1] investigated the role of the nursery-school teacher in developing social from anti-social behavior. Boynton[2] made a study to discover the various techniques used by the teachers in two nursery schools to develope social from anti-social behavior and to evaluate the relative effectiveness of the various techniques. Sears[3] made an intensive study of child training and its effects on personality and endeavored, specifically, to investigate the consequences of punishing children for their aggressive behavior.

Methods of investigation.-- Although a variety of methods were used, the larger number of the investigations were carried on by direct observation of children in nursery schools. Direct observation is "the method by which behavior is recorded while it is in the process of occurring in its natural setting."[4] Curwood[5] made observations in a nursery school of complete incidents of social behavior where teachers entered in. Direct observations in 14 different nursery schools were

1/Cecile Cohen Goodman, The Role of the Nursery School Teacher in Developing Social from Anti-Social Behavior, Unpublished masters thesis, Boston University School of Education, 1947.

2/Marjorie Boynton, Evaluation of Three Teacher Techniques in the Socialization Process of Eighty-Five Nursery School Children, Unpublished masters thesis, Boston University School of Education, 1948.

3/Robert R. Sears, "Spare the Rod," Harvard Alumni Bulletin (February 10, 1951), pp. 384-388.

4/Madeleine Hunt Appel, op. cit., p. 185.

5/Op. cit.

used by Appel[1] to record 641 aggressive episodes. Goodman[2] and Boynton[3] each used original check lists and 16 three hour observations in two different types of nursery schools to obtain their data. Dawe[4] employed the behavior sampling technique, using a stop watch which was started immediately upon noting evidences of a struggle and stopped when the issue was settled or when the teacher interfered. Jersild and Markey[5] observed each child in a nursery school environment for 15 minutes at a time. Using a stop watch, they recorded all activities that might be construed as belligerent, defensive, offensive, resistant or provocative on the part of the child who was being observed. Caille[6] also made use of time controlled observations of free play in a nursery school; obtaining 1002 five minute observations, including data on acquiescence, aggression and resistance. Green[7] used the time sampling technique, observing each child in a nursery school environment for a 30 second interval. Children were observed in a varied order from day to day, in order to guard against

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1/Ibid.

2/Op. cit.

3/Op. cit.

4/Op. cit.

5/Op. cit.

6/Op. cit.

7/Op. cit.

errors that might have arisen if a given child had always been observed early or late in the play period.

Three investigators used the method of direct observation in nursery school, supplemented by experimental situations and interviews with parents. Fite[1] made an intensive study of a few individual children and used direct observation of their play in a nursery school at frequent intervals over a period of 1 1/4 years. She added to this, data compiled from interviews with parents and with teachers, and the data from two kinds of experimental situations; namely, interpretation of pictures portraying aggressive behavior, either through verbalization or through doll play. Baruch[2] made full observational records of the activities of children in the nursery school situation and in addition used material from frequent parent conferences (with fathers and with mothers, each separately). She also employed an experimental situation, using play with dolls representing the child's family. Sears[3] used the method of direct observation and obtained measures of aggressiveness in nursery school play over a four-month period of time. At the end of this period of time, he employed the interview method, asking mothers to report in detail their own behavior toward their child's aggressive acts.

1/Op. cit.

2/Op. cit.

3/Op. cit.

An experimental situation, doll play with a family of dolls who lived in a six-room dollhouse, was then used. The children were presented with the dolls on two occasions for about 20 minutes each, in an effort to measure each child's aggressiveness in fantasy. Comparisons of the three kinds of data were then made.

Only three investigators made no use of direct observational methods in nursery schools. Muste and Sharpe[1] utilized two standardized experimental situations in which the play materials and the children present could be controlled. One situation involved a toy farm with barn, animals, machines, and people. The other situation centered about a wash tub half-filled with water, equipped with small floating toys. Children were paired in various ways, according to sex and age differences or similarities, and were observed in the experimental situation for 15 minutes. In addition, case studies of individuals within each of the environments represented were made in order to add knowledge of environmental background to the interpretation of aggressive behavior. Hattwick[2] was the only investigator to use a behavior rating scale. She recorded the frequency with which 60 particular types of behavior had occurred during a month. Goodenough[3] enlisted the

1/Op. cit.

2/LaBerta W. Hattwick, op. cit.

3/Op. cit.

cooperation of a group of intelligent mothers, in making her observations of anger in young children. Mothers kept records for one month of the anger outbursts of children in their homes. Daily record sheets were kept, recording the child's general condition and a full description of each anger outburst (time, place, duration, provocation, type of behavior, direction, after-effects, methods of control, and outcome).

Characteristics of aggressive behavior.-- Many different kinds of acts of anti-social aggression were found in the data of investigators. These included hitting, biting, kicking, bossing, grabbing toys, refusing to share or take turns, temper tantrums, breaking toys, interfering with activities of other children, pushing, pulling and many others. Fite[1/] found that children naturally tended to express their feelings in open aggression which is the most simple and direct form. The most outstanding characteristic of Hattwick's[2/] behavior rating scale was the prevalence of aggressive, extroverted types of behavior such as: aggressive approaches to other children, negativism to adults, marked physical activity, grabbing toys, attacking, refusing to share, bossing, refusal of foods, breaking toys, rushing into danger, and temper outbursts. Curwood,[3/] in her study of the social relations

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1/Ibid.

2/Ibid.

3/Ibid.

of three-year-old children in a nursery school, found that 39 percent of all social situations fell into the category of aggressive behavior. Baruch[1] reported that more than two thirds of the children showed aggression in some form, indicating that aggression was a common manifestation at all ages. She found that methods of showing aggression varied considerably and included separating one member of the family from the others in the doll-play experiment, spanking them, burying them under boxes or pillows, crushing or twisting them, calling them names, drowning them in the toilet or putting fecal matter on them. Aggression was found to be frequently connected with the toilet and with elimination. Jersild and Markey[2] reported an average of one conflict every five minutes. They ranged from hitting, biting and kicking to milder types of aggressive acts. Two thirds of the conflicts were precipitated by overt or verbal aggression against another child's materials, possessions, space or play activities; approximately one third were precipitated by aggression against the person of another child. They tabulated their data in four categories (1) physical acts of aggression or defense centering around material, space or activities (2) physical acts of aggression and defense centering around attacks on another person (3) verbal acts of aggression and defense (4) weeps, cries,

1/Ibid.

2/Ibid.

calls teacher, calls for help, displays anger. Both Goodman[1] and Appel[2] found that a great many aggressive acts were caused by conflict over possession of property. In Appel's[2] study, 36 percent of the acts of anti-social behavior fell into this category. In Goodman's[1] study, the majority of them did. She observed aggressive behavior of eight types (1) conflict over possessions (2) conflict over taking turns (3) intrusion of new child into activity (4) rivalry for teacher's attention (5) crowding (6) hitting, pulling, pushing, biting, spitting. Similar categories were used by Boynton[3] in addition to conflict over use of equipment, teasing, annoying, swearing, destruction of equipment and disrupting group activity. She found that just three kinds of situations accounted for 67 percent of all the aggressive behavior in her data; they were teasing and annoying, conflict over use of equipment and conflict over possessions. Goodenough[4] listed as causes for anger; desire for attention, inability to make desires understood, thwarted desire to share in the activities of others, difficulties over sharing possessions, disagreements with playmates, problems of social adjustment, and conflicts with authority. Green[5] found that the activity which

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1/Ibid.

2/Ibid.

3/Ibid.

4/Ibid.

5/Ibid.

provoked the most quarrels, in relation to the number of times it was participated in, was sand play; aggressive behavior occurred one fourth of the time. Next in order (one fifth) came construction work and dramatic play, followed by (one sixth) play with toys and destructive and meddlesome acts. Caille[1] found that children resisted other children more than they resisted adults. Dawe,[2] in analyzing 200 quarrels of pre-school children, found that the average duration of quarrels was 23 seconds. In agreement with Goodman[3] and Appel,[4] she also found that the majority of quarrels were started by a struggle for possessions. Dawe[2] observed aggressive behavior within four categories (1) possessions (2) physical violence (3) interference with activity (4) social adjustment. Her data showed that pushing and pulling were the most common motor activity and crying, forbidding, and commanding were the most common vocal activities. She states:[5]

> "The most striking thing about motor activity is that it is almost invariably present as the most prominent aspect of the quarrel. The brevity of the quarrel and the apparent lack of disagreeable after-effects would indicate that the child 'drains off' his anger through motor activity and gets it out of his system."

1/Ibid.

2/Ibid.

3/Ibid.

4/Ibid.

5/Helen C. Dawe, Ibid., p. 155.

Sex differences.-- Most of the investigators reported sex differences in the aggressive behavior of nursery-school children. In a few of the investigations, no attempt was made to record sex differences. Roff and Roff[1] differed from the majority of the investigators in that they found that sex differences in their groups were completely negligible in relation to aggressive behavior. All of the other investigators found that boys exhibited considerably more aggressive behavior than did girls. Goodenough[2] reported sex differences in the frequency of anger outbursts as in favor of boys at all ages after two years. The boys also lead in striking and hitting, which seemed to increase with age during the pre-school period. Green[3] found significant sex differences; the data showing that the average quarrelsomeness index for all the boys combined was considerably higher than that of all the girls. She also found that boys quarrel with boys the most frequently. For the purposes of this investigation, it is interesting to note that she says:

> "....the highest quarrelsomeness index obtained by the girls is found at the three year level, and thereafter there is a steady decrease. The boys do not reach their high point until four years of age, but this too is followed by a decrease....Many points of evidence in this study lead to the conclusion that girls are more advanced in their social development than are boys. The fact that the number of friends that girls have, reaches the peak

1/Op. cit.

2/Ibid.

3/Ibid.

> and begins to decline earlier, that girls reach their high point of quarrelsomeness earlier, and that the ratio of their quarrels to their friendships is consistently less....all lend credence to this hypothesis." 1/

Caille 2/ found sex differences in which the boys exceeded the girls in aggression by an amount which approached very closely to statistical significance (99 chances in 100). Dawe 3/ also found a true sex difference. Boys were found to quarrel more frequently and were more aggressive than girls during quarrels. Her findings correlated with Green's 4/ in showing that girls reached the peak of their aggressive behavior during their third year or about a year earlier than boys do. Girls cried more than boys and gave slightly more factual comments. In agreement with previous research, definite sex differences were also noted by Jersild and Markey. 5/ Boys exhibited both a higher average number of aggressive acts and of conflicts won. Boys hit more than girls and showed a larger number of acts of attack and defense in connection with materials. This study found no conclusive sex differences in verbalization during conflicts, although the girls cried and screamed more than the boys. The sex differences were found to increase as children grow older. At the age of four years, boys do more hitting

1/Elise Hart Green, Ibid., p. 250.

2/Ibid.

3/Ibid.

4/Ibid.

5/Ibid.

and less screaming and crying than girls. Hattwick[1] also found that boys significantly tended to be more aggressive than girls; attacking, grabbing toys, having temper outbursts, rushing into danger, and refusing to share more than girls. in only one aspect of behavior, bossing of others, did girls show the more aggressive tendency. Since bossing involves verbalization, it is not surprising that girls, with their superiority in speech development, exceeded boys on this item. Sex differences were noted by Muste and Sharpe[2] who reported that boys lead in frequency of aggression; in grabbing materials, and in dynamic, outgoing responses to aggression in counter-aggression. Girls used more verbal techniques than did boys. Only in offers to compromise or share, were boys found to surpass girls in the use of verbalization. Boynton,[3] in agreement with many other investigators, found that boys exhibited considerably more aggressive behavior than girls; 62 percent and 38 percent, respectively.

Age differences.-- Most of the investigators also reported age differences, although a few investigations did not record any information about age differences. Caille[4] did not find any significant relationship between age and aggres-

1/Ibid.

2/Ibid.

3/Ibid.

4/Ibid.

sive behavior. Goodenough[1] found that hitting and striking reached a peak in four-year-old boys and that four-year-olds were found to show anger most often in connection with difficulties arising during play with other children. The problem of social adjustment seemed to constitute the most frequent single source of anger outbursts among four-year-olds. The anger outbursts of younger children were found to occur most frequently during solitary play. Possibly, because of the inability of the young child to successfully manipulate his physical environment, he is often irritated at this early age. Green[2] found that the size of the friendship index increased regularly with age, as children tended to become more socialized and the quarrelsome-friendship index showed a steady decrease as children grew older and became well enough adjusted in their social development to play with other children amicably. Dawe[3] found that the quarrels of older children lasted longer than those of younger children and that there was a tendency for aggressiveness and retaliation to increase with age. The younger children started the most quarrels, but the older children played a more aggressive role during the quarrels. Jersild and Markey[4] noted that conflict behavior

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1/Ibid.

2/Ibid.

3/Ibid.

4/Ibid.

showed a decline with age after the age of three. Hattwick[1] found that certain techniques of social adjustment showed greater improvement for four-year-olds than for three-year-olds. Refusing to share, grabbing toys and attacking others were found to be considerably less for the four-year-old group with the longer nursery school experience. This would seem to have two implications for the present investigation (1) nursery-school experience, indirectly including the role of the teacher, has some influence on children's ability to handle their aggressive feelings (2) four-year-olds are the most receptive to the guidance a nursery school offers along these lines. Hattwick says:[2]

> "This would suggest that not until they are four-years of age have children matured sufficiently to get the most benefit from their contacts with other children in the nursery school.
>
> In compliance with routines, three-year-olds seem to profit more from the nursery school experience, while in techniques of social adjustment....the four-year-olds seem to show the greater advance."

Baruch[3] found that 78 percent of the four-year-olds displayed aggression, representing the largest percentage of any of the age groups. Appel's[4] investigation showed that the aggressive behavior of four-year-olds was accompanied by a stronger display of emotion and was more directed than that of other ages.

1/Ibid.

2/Ibid., p. 185, 189.

3/Ibid.

4/Ibid.

Four-year-olds were found to carry their aggressive behavior into more stages and to meet the situation more positively and effectively when they were victims of aggression. Muste and Sharpe[1] reported that, as children grew older, an increase was found in the frequency of aggression.

Generalized findings on aggressive behavior.-- The generalized findings of these research studies would seem to indicate that aggressive behavior serves a useful purpose in the development of children and that it is a vital part of the socialization process. In finding a positive relationship between friendliness and quarreling, Green says:[2]

> "It is probable that quarreling is an essential part of friendly social intercourse....quarreling is a socializing agent and enmities are not likely to result. Play that includes quarreling and making up, is excellent training and probably teaches children to minimize their grievances and to be good sports."

3. Research Studies Concerned Primarily with Teaching Techniques

Teaching techniques.-- Very little research is available on the role of the nursery-school teacher in relation to her treatment of acts of anti-social aggression. A very small number of investigators have concerned themselves primarily with teaching techniques, but with a variety of ages on the pre-school level. There is no investigation of the nursery-

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1/Ibid.

2/Ibid., p. 251.

school teacher's treatment of acts of anti-social aggression exclusively on the four-year-old age level.

Four investigators concerned themselves primarily with the teaching techniques of nursery-school teachers. They were Appel,[1] Goodman,[2] Boynton,[3] and Curwood.[4] All but one of these investigations considered the techniques used by nursery-school teachers, specifically in relation to the aggressive behavior of pre-school children. The main emphasis of the other investigation, Curwood's,[4] was on the different techniques used by teachers to establish, maintain and spread good social relations in a group of three-year-old children in a nursery school situation.

Appel's[1] investigation.-- Appel[1] classified the methods used by teachers in dealing with aggressive behavior, designating some as 'teaching techniques' and others as 'ending techniques'. Teaching techniques included explaining property rights, urging self-defense, suggesting a solution, suggesting children find a solution, interpreting, encouraging friendly acts, making light of troubles or hurts, requiring good manners, disapproval and suggesting retaliation. Ending techniques included diverting, separating, removing, restrain-

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1/Ibid.

2/Ibid.

3/Ibid.

4/Ibid.

ing, arbitrary decisions and enforcing rules.

Of the ending techniques, diverting and separating were successful most of the time; 93 percent and 85 percent, respectively; they were rated good 95 percent and 75 percent, respectively. Diverting appeared to be more desirable because it provided for the redirection of energy into new activity, thereby reducing frustration and consequent aggression. Arbitrary decisions were rated 65 percent effective but only 57 percent good. Although it was sometimes necessary to use ending techniques, on the whole, it was considered better guidance to use techniques more suited to the learning situation.

Of the teaching techniques used, interpreting the wishes, feelings, and purposes of one child to another, ranked high; 71 percent effective and 89 percent good. This finding is of considerable significance to nursery-school teachers and Appel suggests:[1/]

> "Since failure in understanding is one of the causes of hostility between human beings, teachers can make a contribution by fostering from the early years the habit of seeking out and trying to understand the purposes and feelings of others."

Explaining property rights, another technique which encouraged consideration for others, ranked 69 percent effective and 42 percent good. Suggestions were almost equally effective, 66 percent, and were rated good 83 percent of the time. Suggestions were more successful when the teacher was clever in

1/Ibid., p. 193-194.

making her suggestions fit in with the children's purposes. Disapproval or moralizing seemed to put children on the defensive and was effective only 40 percent of the time; the children becoming occupied with their emotional relationships with adults rather than being free to consider what behavior would be constructive in the particular situation involved. Verbalization was effective only 33 percent of the times used, because children of nursery-school age are not sufficiently mature to rely completely on verbal adjustment. Some techniques were considered unsatisfactory because they lacked realism, such as telling children that 'we don't hit', when in reality children often have to hit to maintain their rights and hold their place in their group.

The best techniques were those that avoided unnecessary blocking of children's purposes and energies. A negative approach was found to be desirable only when accompanied by an explanation and when acceptable outlets were suggested. It was found helpful if teachers provided plenty of harmless outlets for destructive aggressive feelings, such as clay to thump and nails to hammer. Young children are only beginning to learn to tolerate frustration and therefore techniques that caused too much frustration were found to be undesirable at this age level because they only fostered counter-aggression.

Although Appel[1/] believes that teachers need to interfere

1/Ibid.

when one child is endangering or taking advantage of another, she cautions that teacher guidance should be at a minimum in many minor conflicts because the limits that children set for each other in their counter-aggressions are often more easily assimilated by the aggressor and involve less frustration than if the frustrating agent were a beloved parent or teacher, whose interference may be interpreted as rejection or lack of love. Through first hand experience, children learn a great deal from each other about the realities of social intercourse.

Goodman's[1] investigation.-- Goodman[1] classified teaching techniques used for dealing with anti-social behavior of nursery-school children as ignoring, moving toward situation, encouraging, disapproving, moralizing, interpreting wishes or feelings of one child to another, explaining property rights, directing to new activity, suggesting solution, sympathizing verbally or physically, supplying equipment, assisting in use of equipment, removing child from group, removing equipment, and restraining child. Results were classified as complying gladly, wandering around aimlessly, continuing anti-social behavior, resolving into social behavior, leaving the situation spontaneously without teacher suggestion, entering new activity, physically or verbally attacking teacher or another child, and continuing the activity that was interrupted, either solitary or social. No significant findings emerged from this particular study. On the whole more positive, sympathetic tech-

1/Ibid.

niques offering a concrete solution were followed by more satisfactory results, but this tendency was not very marked.

Boynton's[1] investigation.-- Boynton[1] divided teaching techniques for dealing with aggressive behavior into three main classifications (1) obstructing the drive of the child (2) recanalizing the drive of the child (3) appeasing the drive of the child. The obstructing approach included removing child, removing equipment, suggesting unrelated activity, stating rule, giving order, admonishing, disapproving, interpreting standpoint of victim to aggressor. The recanalizing approach included suggesting acceptable outlet for aggression, modifying use of equipment, suggesting reconciliation of claims, and supplying new similar equipment. The appeasing approach included tolerating situation and supporting the aggressor. Outcomes were classified as continuing anti-social behavior, developing social behavior, leaving situation to start new anti-social behavior, and leaving situation to start new social behavior.

The data yielded the following results concerning the effectiveness of techniques used by nursery-school teachers in the treatment of aggressive behavior. Teachers were successful 69 percent of the time. They used obstructing approaches 73 percent of the time, recanalizing approaches 18 percent of the time and appeasing approaches 9 percent of the

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1/Ibid.

time. The recanalizing approach was successful 89 percent of the time, the appeasing approach 79 percent, and the obstructing approach 62 percent. In 87 percent of the cases where teachers failed, they had used obstructing approaches, in 6 percent of the failures a recanalizing approach, and in 6 percent an appeasing approach. The recanalizing approach was found to be the most effective one for nursery-school teachers. Not only did it show the highest percentage of success, but it seemed to be the most adequate one from the point of view of the child because the child was able to continue in the desired activity, satisfying his original drive and secure in the knowledge that his new behavior was approved by teachers.

Curwood's[1] investigation.-- Curwood[1] listed as techniques for handling aggressive behavior, trying to find out the cause, redirecting the behavior into desirable channels in harmony with the original motive, maintaining the established rules of right and wrong, removing the aggressor or the disputed object from the immediate situation, and redirecting interest into a desirable activity. It is interesting to note that the teacher entered into the social relations of three-year-old children most often in situations involving aggressive behavior (39 percent of all situations). The reasons for the teacher's interference were to prevent physical

1/Ibid.

harm, to give the child more social control than he could exercise alone, and to maintain group standards of conformity. The guidance of the teacher was largely positive, although it was called forth in response to negative behavior on the part of the children. Almost one fourth of these incidents represented attempts, on the part of the teacher, to guide children in similar directions to which they were originally going.

4. Research Studies in which Teaching Techniques Were Included as a Minor Portion of the Data

Teaching techniques.-- Some research workers have given consideration to the role of the nursery-school teacher as a minor portion of their study, sometimes including it in the analysis of their data, and sometimes merely mentioning it in the summary under educational implications. In other investigations, teaching techniques have been so far divorced from the interests of the investigator as to warrant discarding the data, if teachers interfered with the aggressive behavior of nursery-school children. However, even the investigations that concerned themselves primarily with the underlying causes of conflict behavior or the methods children used to solve their own quarrels, gave some recognition to the fact that the nursery-school teacher's role is significant. Jersild and Markey,[1/] in concluding their study of conflicts between

1/Ibid.

pre-school children, state: "The present findings suggest the need of a critical study of the techniques used by nursery-school teachers in dealing with conflict behavior."[1]

Green's,[2] Dawe's,[3] and Roff and Roff's[4] investigations.-- These three investigators reported negatively regarding the influence of teaching techniques on aggressive behavior of nursery-school children. Green[2] said that teachers were present, but they did not interfere unless there was danger of physical injury or unfairness. If teachers interfered with any child who was being observed, the record was discarded. Dawe[3] was also not interested in teaching techniques. She chose the morning free-play period for her observations particularly, because teacher-control was at a minimum then. The observer terminated her observations whenever the teacher interfered. Roff and Roff[4] reported that their data indicated that neither the number of teachers nor the amount of teacher interference with conflicts had any marked effect.

Goodenough's[5] investigation.-- Goodenough[5] found that the methods of control used most often by parents of children who had frequent outbursts of anger, were granting of the child's

1/Ibid., p. 177.

2/Ibid.

3/Ibid.

4/Ibid.

5/Ibid.

desire, removing source of trouble, coaxing, soothing, and threatening. Methods of control used most often by parents of children who had few outbursts of anger were diverting the child's attention, reasoning, ignoring the outburst, isolation, and scolding. It was also concluded that the immediate effectiveness of a method does not always correspond to its value in training for self-control on similar occasions.

Jersild and Markey's[1] investigation.-- This particular study included in its aim, the investigation of the behavior of adults toward children's altercations. Three kinds of teacher interferences were recorded (1) teacher intervenes during conflict, gives command or suggestion and children keep on fighting (2) teacher interferes and terminates conflict before either child has prevailed over the other (3) teacher enters situation after children have apparently themselves brought the conflict to an end.

Conflicts occurred most frequently in the group with the smallest number of teachers. It was often observed that an aggressor would stop activity when the teacher approached. Therefore, more teachers had the effect of reducing the number of conflicts, quite apart from the actual interferences. The nursery-school group that showed the smallest amount of conflict behavior was subject to the most restraint by teachers. However, the data also indicated that restraints that

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1/Ibid.

were imposed by teachers did not progressively lower the frequency of conflict behavior, but had only a temporary inhibiting effect, because this same group showed an increase in aggressive behavior the following year in a kindergarten with less teacher interference. On the other hand, the children who were less interfered with and who were allowed to use their own methods of solving conflicts did not grow progressively more combative, but showed a very slight decline in aggressive behavior the next year.

The investigators were unable to advance specific recommendations about the effect of teacher guidance on children's combative behavior. They merely stated that the methods used did not bring about a progressive decline in aggressive behavior. They did, however, observe that the teachers used the same bland methods in terminating violent disputes as in terminating milder conflicts. They stated:[1]

> "From the point of view of the child, it must have been difficult to distinguish between the teacher's objections to distinctly grave trespasses and her objections to aggressions of a mild and relatively innocuous sort. It is possible that a little less striving for angelic perfection through efforts to curtail all minor disputes among children, and a little more severity in dealing with the child when it seems that discipline actually is needed, would have a more salutary effect."[2]

Fite's investigation.-- Fite[2] makes considerable mention of the role of the teacher in the formation of children's

1/Ibid., p. 175-176.

2/Ibid.

attitudes toward aggressive behavior. Techniques, used most frequently by teachers in handling aggressive behavior, were making suggestions either for play or for a way out of the difficulty, getting the child to settle the conflict by verbalization, and removing the aggressor from the situation. Less frequently, teachers were found to use techniques such as pointing out to the aggressor that he is hurting the other child, interpreting the wishes of the victim, changing the subject, having the child make restitution, pointing out the consequences of his act, telling him that he deserved the retaliation he received, and a few simple prohibitions.

The immediate responses to these techniques were varied, but it was noted that techniques were more successful if they led to a satisfaction of the wants and needs of all parties in the conflict. The teacher's cooperation in actively helping attain a solution seemed to be the most realistic and successful technique of treating aggressive behavior in the nursery school. Verbalization, as a technique, was found to be only moderately successful. Fite[1/] thought that this was due to the teacher's apparent assumption that verbalization should be a way of making clear just what the aggressor or the victim wants; whereas the child is, in reality, looking for a way out and not for more expression of feeling.

Fite[1/] believes that an important consideration of the

1/Ibid.

teacher in treating aggression should be the deeper implications of the treatments used and not the immediate results. A child has a deep need to win love and at the same time must have some outlet for aggressive feelings. Unconditional acceptance of the children by their teachers was found to be more important than any of the techniques they used:

> "However the children behaved, the teachers fundamentally accepted them and the children responded to this fundamental feeling more than to any techniques the teachers tried to use." 1/

Muste and Sharpe's 2/ investigation.-- In this study, the role of the teacher is merely given passing mention in their description of the rigid school, where the children were thought to be inhibited in the expression of aggressive drives for fear of weakening their already uncertain relationships with adults. Mention is also made of the teacher in the college nursery school describing the warm, individual, and affectionate relationship that seemed to exist between teachers and children. These investigators, in agreement with Fite, 3/ also noted that, under pressure from controlling adults, some children find indirect expression for their aggression because they are fearful of losing the love of adults.

1/Ibid., p. 294.

2/Ibid.

3/Ibid.

Caille's[1] investigation.-- Caille[1] found that the variation seemed to lie, not so much in the techniques the teachers used, but in such intangible elements as the general personality of the teacher, her actions, tone of voice, and emotional condition. Some teachers appeared to be superior to others in their ability to make children understand that they expected positive responses.

Baruch's[2] investigation.-- Concerning the role of the teacher in the treatment of aggressive behavior in the nursery school, Baruch states:[3]

> "The importance of guidance at this early age was visibly enumerated in almost as many instances as there were children. The average teacher, however, is ill-equipped for guidance. She has, for one thing, not learned to admit and understand children's aggressions. She denies their existence. She tries to make children be 'sweet' and 'social". In consequence, the children do not have sufficient opportunities to face and live through their aggressive feelings, and so have greater difficulty in handling such feelings realistically as they go through life. When aggression does crop up, the pressure of guilt all too frequently leads into the sort of solution that is far from constructive, either to their own personality or to the society in which they live. Can teachers learn to admit, without too great anxiety, that aggression in young children is normal? This is a question of indisputable importance."

The student-teachers, who as part of their training participated in this doll-play experiment, were found to be perceptibly influenced in their attitudes toward aggressive behavior

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1/Ibid.

2/Ibid.

3/Ibid., p. 257-258

and changed their approach to children from externally directed teaching to a more fundamentally centered guidance. They were able to consider a display of aggression, not as a personal affront, but rather as a normal part of the emotional and social development of children. They became more natural and spontaneous in their ability to work with children, and because of their increased understanding they tended to do less of the sort of guiding that would enhance the child's sense of guilt.

Sears's[1] investigation.-- The direct observations in the nursery school, coupled with the parent interviews, indicated that, up to a certain point, the children who were more severely punished by their parents displayed more aggression in the nursery school than children who were punished only slightly. However, it was observed that in cases of extremely severe punishment, involving repeated spankings and threats of desertion, the children tended to show less aggressiveness at the nursery school.

The doll-play experiment was used to test the prediction that the most severely punished children, who were inhibited in the overt expression of their aggression, would show the highest expression in their fantasies. Measures of each child's aggressiveness in fantasy were obtained by finding the percentage of his total acts that were of an aggressive

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1/Ibid.

nature in the doll-play experiment. For comparison purposes, children were classified in three groups (1) punished little (2) moderately punished (3) severely punished. Although the first and third groups rated low in measures of actual aggressiveness in the nursery school, group three (the severely punished children) were found to be significantly more aggressive in their fantasy than either of the other groups. Although mothers had been able to make children non-aggressive and compliant in their overt social behavior by using very severe punishments, they had not been able to eliminate the basic hostility within the child.

The data suggests that very severe punishment for aggression is an undesirable method of developing in children a strong moral sense about injuring others. This is based on evidence that unreleased hostility interferes with children's ability to identify themselves successfully with their parents, and identification is considered to be an important mechanism by which morality is inculcated into young children. Sears[1/] states:

> "....punishment of aggression in childhood is itself a frustration for the child, and hence actually increases his tendency to be aggressive as long as the punishment is not too severe. Further, when the severity is great enough to reduce actual aggressive behavior in real life, there is nevertheless a strong residual tendency toward aggressiveness in fantasy. And finally, when this residual aggression exists, there is a tendency for it to spill over and

1/Ibid., p. 388.

pervade such apparently non-social belief systems as those involving religion and theories of illness.

Obviously no society can exist if its members are at one another's throats constantly. There must be some degree of control. This suggests that we might well search for the causes of aggression and for other methods of control than punishment."

Generalized findings on teaching techniques.-- In general, investigators found a higher percentage of success in the use of the more positive techniques that took into consideration the child's feelings and purposes. It was found helpful if teachers provided plenty of harmless outlets for aggression.

Although some research has been done in an effort to discover suitable methods of handling the aggressive behavior of young children, much more research still needs to be done. Redl[1] speaks of this need, when he says:

"....more studies (need to) be made on the dynamics of influencing behavior. To know why things happen is only half the job. The next step is to know how to deal with behavior....to find a much more precise instrumentology for 'interfering' with it...."

1/Fritz Redl, "Are Parents Worrying About the Wrong Things?" Child Study (Summer 1953), p. 7.

CHAPTER III

THE SUBJECTS

Nursery schools.-- Nursery schools have been established for a sufficiently long time to have proved their value in the field of the education of the young child. Read[1/] defines the nursery school as:

> "a school serving the needs of two-, three-, and four-year-old children by offering them experiences adapted to what is now known about the growth needs of these age levels. It shares with parents the responsibility for promoting sound growth in a period when growth is rapid and important."

In addition to its educational value, the nursery school has made a significant contribution to research through its use as a laboratory for learning about human behavior.

One need only look at the Iowa Studies and the achievements of schools like the Merrill Palmer to ascertain the values of nursery education. However, it does not necessarily follow that all nursery schools are equally good; and the inadequacies of some, make it necessary to tell what a good nursery school is. Unfortunately, legislation concerning standards for nursery schools is still relatively inadequate and the result has been that many so-called 'nursery schools' have been allowed to function with inadequate facilities, untrained

1/Katherine H. Read, The Nursery School, W. B. Saunders Company, Philadelphia, 1950, p. 17.

staff, unsuitable equipment, and over-crowded conditions. Because of this lack of uniformly good standards for nursery schools and because the nursery school movement is still relatively a newcomer to the educational field, many popular misconceptions have sprung up concerning the function of the nursery school. Therefore, it seems valuable to make an attempt to define, in so far as it is possible, what is meant by a good nursery school.

The good nursery school gives careful consideration to many factors. The educational objectives embrace the all-round adjustment of the child -- physically, emotionally, mentally, and socially, promoting the health, safety, happiness, and learning of each child within the group. The equipment is planned to meet the needs of young children; providing opportunities for both large and small muscle activity, social and dramatic play, experiences with creative materials such as moist clay, easel paints, finger paints, water play, blocks, stories, music, rhythms, science experiences etc. The groupings are small and informal and there is ample opportunity for free play and experimentation. The program is flexible enough to provide for individual differences in the children and to meet the needs of each child in the group. There is plenty of space for play, both indoors and outdoors, and standards for building safety, fire precautions, good sanitation and health conditions are maintained. The teaching staff consists of teachers who are adequately prepared in the specific field

of nursery education and child development. This includes courses in child development and psychology, methods and materials, family and community life, and supervised practice-teaching in nursery schools. The good teacher of young children also possesses personal attributes that contribute to her suitability as a nursery-school teacher, described as:[1]

> "The good teacher of young children is a person with a warm, genuine liking for children and an awareness of their emotional needs, apart from her own. She is sufficiently mature to be able to establish good relationships with adults and takes a professional responsibility for her work. She realizes that the nursery school experience is but one part of the child's life and, therefore, seeks to work constructively with his parents and the other adults important to him. The good teacher has a comfortable attitude toward authority, deals with out-of-bounds behavior in a non-punitive way, but can set up appropriate limitations to a child's activity when these are needed. She is responsive and spontaneous but sufficiently calm and secure within herself to create a milieu of confidence and support within which the young child can grow."

The good nursery school affords parents the opportunity to observe their child in relation to other children of similar age; as well as the opportunity to observe children other than their own and to draw some conclusions from their observations, concerning the normal character of much of their own child's behavior. Opportunities for individual conferences, for group discussions with parents and teachers provide the important relationships between home and school.

1/Subcommittee on Day Care Standards and Licensing Procedures, Recommended Minimum and Preferred Standards for Agencies Giving Day Care to Children under Seven Years of Age, Massachusetts Department of Public Health, 1952, p. 5.

The values of a nursery school experience are described by Biber[1] as enriching

> "....the life of the young child, bringing to greater fulfillment the impulses which are natural to him at this stage of his development. Further, it has been indicated how important are the attitudes surrounding these experiences in relation to his growing sense of ego, his extended kinship feelings beyond the limits of home and family, the development of his creative and expressive capacities, his confidence in his own ability to discover, invent, and solve problems, his indirect resolution of emotional problems through symbolized dramatic play....Certain features of nursery school are distinct from those of the home. For the sake of the child's wholesome growth as a psychologically independent individual there is great value in his realizing as early and as deeply as possible that the world outside the home and family holds a full measure of warmth and security, great possibilities for pleasure and accomplishment. For some of the specific problems of his emotional development the nursery school has a distinct contribution to make just because his teachers, though intimate and close to him, are not as emotionally involved with him as are his parents, because there are children to enjoy with whom he does not have to work out sibling relationships, because the stage can be set for his childish interests and activities without interfering with the needs and preferences of adult living. For many children there is healthy satisfaction, also, in the expanded opportunities for achieving skills that add to one's feelings of independence and, more than that, an emerging sense of having a life of one's own."

Thus, the world of the small child is extended through a nursery school experience. The nursery school is a supplement to the home rather than a substitute and makes its own unique contribution to the all-round development of the young child.

A description of the school used in this study.-- The school used in this study is a small private nursery school,

1/Barbara Biber, How Can Nursery School Be Expected to Benefit a Child?, New York State Association for Nursery Education, New York, 1949, pp. 4-5.

located in a suburban community. Its building is an eight room house, converted into a nursery school from a private dwelling. There are two large fenced-in play yards, providing sunny and shaded areas. Several large trees, a pine grove, and a stone wall complete the natural setting of the yard. In addition to the standard type of nursery school yard equipment (swings, slide, sand-box, wheel toys, packing boxes and planks, jungle-gym, etc.) there is a small play-house under the porch and two pet rabbits are each housed in their own sturdy cages.

Indoors, the first floor is used by a group of 18 four-year-old children and the second floor is used by a group of 12 three-year-old children. Each department has a large room, two or three small rooms and a bathroom. There are individual cubbies for each child's clothing and 'treasures'. There are built-in easels for painting, enamel-top tables for finger-painting, low sinks for water-play, low shelves with moist clay, crayons, manila paper, puzzles, scissors, paste, games, books, etc. Building blocks and accessories to construction are arranged on low shelves with plenty of floor space nearby for building. There is a completely equipped housekeeping corner and 'dress-up' clothes are provided. A piano, phonograph, and various musical instruments (drums, sticks, xylophone, bells, etc.) are available for musical experiences. There is an indoor climbing apparatus, swing, and small slide to provide for active indoor play. A mid-morning lunch of fruit juice and

crackers is served at small tables, with the children seated on small size chairs. Individually owned rest mats (kapok filled and plastic covered on the side that touches the floor) are used for mid-morning rest. Table 1 shows the approximate daily schedule for the school.

Table 1. Approximate Daily Schedule

Time	Activity
(1)	(2)
8:45 a.m.....	Arrival at school and morning health inspection
8:45-9:30....	Outdoor play
9:30-10:30...	Indoor activities
10:20-10:30..	Toilet routine
10:30-10:40..	Juice and crackers
10:40-10:55..	Rest
10:55-11:10..	Music and rhythms or story
11:00-11:45..	Outdoor play
11:45.....	Dismissal

The school is staffed by a director, assistant teacher, and six student-teachers. The director teaches the four-year-old group. She is a college graduate and has done graduate work in pre-school education toward a masters degree; she is married and has three children.

There are no specified racial, religious, cultural or economic requirements for admission, and children are admitted in order of application, with preference given to neighborhood children or younger siblings of previous pupils. A phys-

ical examination is required and certificates of immunization to diphtheria, whooping cough and vaccination against small pox have to be filed.

The four-year-old group.-- The data for this study was collected in the four-year-old group, between the dates of October 1, 1951 and July 31, 1952. There were eighteen children in this group; nine boys and nine girls. For the summer session, three boys and one girl were added to the group, some of the previous members of the group were no longer present, and some younger children shared the same playground. The size of the group remained the same. The staff consisted of one teacher and three student-teachers.

Table 2 shows the educational and occupational levels of the parents of each child.

Table 2. Educational and Occupational Levels of Parents

Child's Name	Occupation of Father	Education of Father	Occupation of Mother, before marriage	Education of Mother
(1)	(2)	(3)	(4)	(5)
Alice....	Business	College	Student	College
Amy.....	Business	High school	Business	Business school
Arthur...	Professional	College	Student	College
Billy....	Semi-professional	High school	Professional	College
Calvin...	Business	High school	Business	High school
Eddie....	Professional	College	Professional	College
Emily....	Professional	College	Business	College

(concluded on next page)

Table 2. (concluded)

Child's Name	Occupation of Father	Education of Father	Occupation of Mother, before marriage	Education of Mother
(1)	(2)	(3)	(4)	(5)
Harry....	Professional	College	Student	College
Howard...	Professional	College	Professional	College
Isabel...	Professional	College	Student	College
Laura....	Professional	College	Professional	College
Mark.....	Professional	College	Professional	College
Michael..	Business	College	Business	College
Mickey...	Business	College	Business	Business school
Nancy....	Military	College	Professional	College
Natalie..	Professional	College	Business	College
Neil.....	Professional	College	Professional	College
Nellie...	Business	High school	Semi-professional	High school
Noreen...	Business	College	Business	Business school
Norma....	Skilled-trade	High school	Business	High school
Ralph....	Professional	College	Professional	College
Timothy..	Military	College	Professional	Professional Training

The majority of these children come from well-educated parents; most of whom are both college graduates and many of whom hold graduate degrees. Eighty percent of the fathers and sixty-four percent of the mothers are college graduates. The parents of the children are engaged in business or professional careers predominantly; the fathers being university professors, physicians, business men, electricians, engineers, teachers, photographers, builders, naval officers and army officers.

The children used in this study ranged in age from four

years to four years and eleven months; the average age was four years and five months at the mid-point of the study. Table 3 shows each child's age at the mid-point of the study.

Table 3. Ages of Subjects at Mid-point of Study

Names	Ages
(1)	(2)
Neil.....	4 years 11 months
Harry.....	4 years 11 months
Laura.....	4 years 9 months
Billy.....	4 years 9 months
Amy.....	4 years 9 months
Nancy.....	4 years 8 months
Mark.....	4 years 7 months
Mickey.....	4 years 6 months
Noreen.....	4 years 6 months
Ralph.....	4 years 5 months
Timothy.....	4 years 5 months
Isabel.....	4 years 5 months
Emily.....	4 years 4 months
Natalie.....	4 years 4 months
Norma.....	4 years 3 months
Eddie.....	4 years 3 months
Nellie.....	4 years 2 months
Arthur.....	4 years 1 month
Michael.....	4 years
Howard.....	4 years
Calvin.....	4 years
Alice.....	4 years

Characteristics of the four-year-old child.-- In the writer's experience, substantiated by Gesell[1/] and others, the four-year-old may be described as follows. Four is an

1/Arnold Gesell, The First Five Years of Life, Harper and Brothers Publishers, New York, 1940, and Infant and Child in the Culture of Today, Harper and Brothers Publishers, New York, 1943.

age of assertion and defiance. It represents a swinging away from the docile, pleasing ways of the three-year-old. The four is no longer as dependent on adults as the three. Since he is broadening his interests and his social relationships, he feels a new sense of personal power within himself. The approval of adults is no longer so necessary to him because life has become bigger and better. There is challenge in new relationships, in new friendships, in his capacity for broader social contacts. He doesn't know how to handle his new powers wisely; they go to his head and he is likely to be intolerably conceited. With an increased and tremendously enlarged vocabulary at his command, he begins to verbalize and he talks and talks. If adults interfere with his plans, they are open to the most scathing criticism and are as likely as not to be called names such as dope, dumbell, stinky, stupid, etc.

Fours run in high gear. They are physically very active and lively. They run fast, hop, jump, and climb with ease. A four can learn to skip, whereas a three can only skip in a lame-duck fashion. His motor drive is high and he speeds up and down on tricycles, showing off with all kinds of fancy tricks. His small muscle control has advanced along with this and he is more capable with scissors, crayons, puzzles and tools. He can dress himself quite well and can manage buttons and zippers. He can stand on one foot and throw a ball overhand. He walks more freely and his hands, arms, legs, and

feet are becoming emancipated from his total postural set. His dancing and response to rhythm are more graceful and better coordinated.

His mind is also working at a vastly accelerated pace and he is full of ideas. He talks constantly and can now talk at the same time that he is doing other things. It is an age of questions and he incessantly asks 'why', 'why', 'why'; sometimes seeking information, sometimes wanting social contacts, and sometimes just enjoying hearing himself talk. He is no longer content with simple sentences and he uses adverbs, conjunctions, and expletives. He is particularly interested in silly sounds and loves to play on words. Bathroom talk is at a height. He has a fluid imagination which often goes beyond bounds. This same fluidity makes him a fabricator and he finds it difficult to draw the line between reality and imagination. However, this same fluid imagination makes it possible for him to dramatize almost any experience he has had and provides a definite impetus for socialization through dramatic play. The drawings and paintings of the four-year-old have recognizable form; as if by miracle, the blobs of color of the three-year-old have now become formed. He can draw a man, even though his sense of proportion is poor. For example, he may draw huge ears and omit the neck entirely; or attach legs directly to the head and omit the body. His understanding has also begun to increase and he is trying hard to grow up. He longs to be

five years old and birthdays take on a new significance for him. He is able to understand a few rules and will accept boundaries, as long as he is not held in too tightly.

Emotionally, the four-year-old is much less stable than he was at three. At four, he is moving on toward five when he will come into focus again. The period in between is a rather unsettled and unstable one. Gesell[1/] believes that this emotional imbalance is part of the general growth process. He says:

> "The four-year-old tends to go out of bounds....but fundamentally he is striving (through his growth impulsions) to identify himself with his culture, and to comprehend its intricacies."

The four-year-old is becoming truly a social being. He wants to play with other children and his play life becomes a very important part of his existence. Even though the four-year-old tends to be bossy and domineering, he is extremely sociable and delights in playing with other children in a fairly integrated fashion. Sociodramatic play is his delight and housekeeping play, doctor, trains, and block-building offer opportunities for role playing. His play is becoming much more cooperative and two or more children tend to work together on a block construction and contribute their efforts toward a common goal. Although social patterns are partly offset by anti-social conduct, the four-year-old is basically

1/Arnold Gesell, Infant and Child in the Culture of Today, Harper and Brothers Publishers, New York, 1943, pp. 226-227.

more interested in socialization than in resistance. Because the four-year-old seems to be so much more capable and is actively more sociable, seeking out companions, and engrossing himself in cooperative or social-dramatic play with other children, there is a tendency for parents to reduce supervision at this point in the erroneous belief that the child is capable of handling social situations completely on his own. Concerning this viewpoint, Gesell[1] holds the following opinion:

> "The four-year-old still needs very watchful supervision. It is often at this age that too much is put upon the child. He may now be able to fight his own battles, and acquires more self-control because he can handle a situation alone. But many of the battles need never have been fought if proper supervision had been given in the first place."

The four-year-old child is in a transitional period between the two calmer, more stable ages of three and five. He is breaking away from the babyish dependence of the three-year-old and preparing himself for the increased knowledge and skills that he will have mastered by the time he reaches five. It is a stormy period of reaction that can be likened somewhat to the period of adolescence later on. It represents a breaking away from dependence and a wild surging toward independence on a higher level.

A teacher of four-year-olds needs to feel fairly secure in her own right. She must have a stability of her own, because she receives little gratification from her relationships

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1/ Op. cit., p. 234.

with her pupils. She must be able to take insults and not feel personally threatened. Above all, she must be able to give freely of her love and understanding to children who seem, at the moment, to deserve it least; who are no longer oriented toward her but who are moving away from her. The four-year-old needs to feel especially secure in the knowledge that he is loved in spite of his extreme four-year-old behavior. It is a challenge to the teacher of fours to give them unconditional love, along with reasonable limits and infinite understanding.

The teacher's philosophy concerning the handling of anti-social aggression in four-year-olds.-- A thorough study of the literature and research dealing with aggressive behavior provides a background for the teacher's philosophy. There is no 'one way' to deal effectively with aggressive behavior. There are many ways and they will vary from person to person and situation to situation. Basically, however, there are some important considerations to keep in mind.

Children need guidance. They need to be taught ways of getting along with other children. They need to be helped to learn about sharing and taking turns, but they need gentleness, love, and understanding. They need to feel that the teacher is on their side; that she knows it's hard to remember; that she is willing to make allowances for mistakes; that she is willing to remind children again and again; that her standards

are not too high and that she does not expect children to remember just because she told them once.

Although the teacher allows children to settle some of their smaller fights and arguments (according to their capabilities), she does not sit back and insist that adults have no place in helping children settle their quarrels. She steps in, she gives guidance, she sets limits, she makes suggestions, she interprets behavior and feelings, and she prevents children from hurting one another.

She accepts children's hostile and aggressive feelings at the same time that she limits the behavior. She says things like: "I know you feel angry, but I can't let you pinch Susie because it hurts her."

She helps children channel their aggressive feelings into acceptable outlets. She provides soft dolls to be spanked, clay to be pounded, punching bags to be hit, hammers and nails to bang upon. On the long range side, she provides experiences with plenty of paints, finger-paints, moist clay and water play, as therapeutically excellent materials for reducing some of the tensions that lie behind the outward manifestations of aggressive behavior.

The teacher arbitrates, encouraging each child to express his feelings; helping him learn to recognize them. She enters situations to help; not to blame. She tries to find out what the matter is and helps children find solutions for their problems. She knows that young children have to learn ways

of getting along with one another.

She avoids making children feel small and inadequate. She doesn't shame, threaten, or call names. She avoids using terms such as 'bad boy', 'naughty girl'. She tries to separate the behavior from the child, because she believes with Lawrence Frank[1/] that:

> "....socialization for the child without undue emotional stress and strain during the process....has such great consequences for our social life. If we could persuade parents and teachers to avoid characterizing the child as bad or naughty, while defining the behavior, and then give the child ample reassurance when receiving such lessons, undoubtedly we could make an immense contribution to the reduction of delinquency, criminality and other non-criminal, but socially destructive conduct on the part of those who spend their adult lives proving by the acquisition of property, prestige, and power that they are not as guilty or as worthless as they were repeatedly told in childhood."

There is an underlying feeling of warmth and affection for children and she is able to give children unconditional love in spite of their anti-social behavior. A judicious combination of love and limits is essential in the teacher's treatment of the aggressive behavior of four-year-olds.

1/Lawrence K. Frank, "The Fundamental Needs of the Child," Mental Hygiene (July, 1938), 22:376.

CHAPTER IV

THE STUDY

1. Description of the Experiment

Trial observations.-- During the fall of 1950, trial observations were made in the nursery school to determine the possibilities of initiating a study of the teacher's role in the treatment of the aggressive behavior of nursery-school children. From an examination of these trial observations, it was decided to limit the study to: (1) the four-year-old age group (2) a study of only the anti-social types of aggressive acts (3) acts directed against other children only and not those directed toward adults, animals, or inanimate objects (4) the kinds of treatment used by teachers (5) the immediate results (6) a four month period of time.

How the data were collected.-- The investigation was carried on, in the four-year-old group of the nursery school, by the method of direct observation, during the 1951-1952 school year (from October 1951 through July 1952). A mimeographed form was used, with the following headings: (1) date (2) name of child (3) situation (4) aggressive act (5) teacher's treatment (6) result. The play situation, the aggressive acts, and the teacher's treatment were described as fully as possible during the recordings. The results were classified as either successful or unsuccessful. An incident was considered to

have been treated successfully if the child stopped that particular act of anti-social behavior and if he did not immediately go on to another anti-social act. For the purposes of this investigation, the term anti-social aggression was used to denote any verbal or physical behavior, on the part of a child, that was directed against the person or activities of another child or group of children.

Because of the fact that the investigator was director of the nursery school, teacher of the four-year-old group, and responsible for the training of student-teachers; it was not possible for her to record every instance of teacher-treatment given to every act of anti-social aggression. This limitation was counteracted, in part, by extending the length of the investigation from four months, as originally planned, to a period of ten months.

A sample set of the observations will be found in the appendix. The investigator recorded 155 acts of anti-social aggression, which were treated successfully or unsuccessfully by teachers in the four-year-old group of the nursery school, over a ten month period of time.

2. Classifications of the Data

Kinds of teacher treatments.-- The investigator found that there were four general classifications of treatments used by teachers. They were (1) physical treatment, help or restraint (2) simple commands (3) suggestions of things to do

(4) interpretations. Physical treatment included moving near situation, removing or restraining aggressor physically, providing substitute toys or similar equipment, adding or removing equipment, and entering the play to give it direction. Simple commands included stating rules, disapproving or prohibiting. Suggestions included warning child ('gently', 'try to remember'), stating proper use of equipment, suggesting a new activity (related or unrelated), sending child to a routine activity, suggesting child call for teacher's help, suggesting solution or reconciliation, suggesting child verbalize, and suggesting acceptable outlet for aggression. Interpretations included explaining ownership, turns or sharing, interpreting situation, interpreting other child's feelings, interpreting other child's behavior, interpreting aggressor's feelings, and interpreting aggressor's behavior.

Kinds of aggressive acts.-- Aggressive acts were divided into four classifications (1) physical acts directed against persons (2) verbal acts directed against persons (3) physical acts directed against the activities of persons (4) verbal acts directed against the activities of persons.

Kinds of results.-- Results were classified as successful or unsuccessful, according to the immediate effectiveness of the treatments. The data did not include sufficient information to test the long range effectiveness of treatments with any degree of accuracy. However, looking at the behavior

changes of specific children, there seemed to be a tendency for aggressive behavior to decrease progressively during the second semester; possibly, due to the fact that children had had a longer experience in the nursery school. From a long range point of view, one child who accounted for the largest percentage of aggressive acts (33 percent of all the aggressive acts recorded in the data) showed a marked improvement; specifically, the first semester he accounted for 45 percent and the second semester for only 17 percent of all the aggressive acts recorded in the data. In other cases, the tendency was not quite so marked and, in a few cases, aggressive behavior seemed to increase very slightly during the second semester. However, the investigator was not able to record every instance of teacher-treatment given to every act of anti-social aggression and therefore both measures of aggressiveness and of long range effectiveness of treatments tend to be quite inconclusive.

3. Analysis of the Data

Effectiveness of kinds of teacher-treatment used for aggressive acts in relation to age, sex, and time differences.--Table 4 shows the effectiveness of each of the four kinds of treatment in relation to age, sex, and time differences.

Interpretations were used most frequently for all ages, both sexes and at all times; but were only most effective with older children and girls. Possibly, this is due to the fact

that interpretations involve an understanding of the feelings and purposes of others and maturity would certainly be an asset here (girls have been rated by several investigators as maturing more rapidly than boys at the pre-school age level).[1/]

Table 4. Teacher Treatments for Aggressive Acts in Relation to Age, Sex, and Time Differences[a/]

Differences		Teacher Treatments											
		Physical Treatment			Commands			Suggest-ions			Interpret-ations		
		T	S	%	T	S	%	T	S	%	T	S	%
Age	Younger Children.	21	12	57	8	6	75	20	17	85	41	32	78
	Older Children.	16	11	69	6	5	83	15	12	80	25	22	88
Sex	Male.....	30	16	53	12	9	75	26	22	85	53	41	77
	Female...	7	7	100	2	2	100	9	7	78	13	13	100
Time	First Semester.	27	13	48	8	5	63	19	15	79	27	18	67
	Second Semester.	10	10	100	6	6	100	16	14	88	39	36	92

a/T -- tried
S -- successful
% -- percentage of success

1/Elise Hart Green, Ibid.
Helen C. Dawe, Ibid.

Treatments were used 90 times for younger children and were 74 percent effective; 62 times for older children and were 81 percent effective; 121 times for boys and were 73 percent effective; 31 times for girls and were 94 percent effective; 81 times during the first semester and were 63 percent effective; and 71 times during the second semester and were 93 percent effective.

Treatments were used most often for younger children, for boys, and during the first semester but were completely reversed in effectiveness. That teachers were most effective in treating the aggressive behavior of older children, of girls, and during the second semester would again seem to indicate that maturity and length of nursery school experience were factors which contributed to the success of the teacher's treatment of aggressive behavior.

Kinds of aggressive acts in relation to age, sex, and time differences.-- Table 5 shows the relationship between the various kinds of aggressive acts and age, sex, and time differences.

There was very little verbal aggression recorded in the data and all of it was treated successfully by teachers. Older children used verbal types of aggression more frequently than younger children, which is natural since language development increases with age during the pre-school years. It is also not surprising that verbal types of aggression were used more often during the second semester than earlier in the year

because the children had had the benefit of a longer nursery school experience and were beginning to learn to channel their aggression into verbal expression, as a substitute for the more direct physical expression. That boys exceeded girls in verbal types of aggression is rather unusual, because most investigators found the opposite to be true. However, the number of verbal incidents in this study is very small and therefore this probably does not represent a true sex difference.

Table 5. Kinds of Aggressive Acts in Relation to Age, Sex, and Time Differences[a/]

Differences		Aggressive Acts											
		Verbal						Non-verbal					
		Against Persons			Against Activities			Against Persons			Against Activities		
		T	S	%	T	S	%	T	S	%	T	S	%
Age	Younger Children.	2	2	100				69	50	72	16	14	88
	Older Children.	4	4	100	3	3	100	44	34	77	13	10	77
Sex	Male.....	6	6	100	3	3	100	89	62	70	22	17	77
	Female...							24	22	92	7	7	100
Time	First Semester.	2	2	100				64	38	59	15	11	73
	Second Semester.	4	4	100	3	3	100	49	46	94	14	13	93

a/T -- tried
S -- successful
% -- percentage of success

Effectiveness of kinds of teacher treatment in relation to aggressive acts.-- Table 6 shows the effectiveness of each of the four types of teacher treatments used in handling each of the four kinds of aggressive acts which were recorded in the data.

Table 6. Effectiveness of Teacher Treatments in Relation to Aggressive Acts[a/]

Aggressive Acts	Teacher Treatments											
	Physical Treatment			Commands			Suggestions			Interpretations		
	T	S	%	T	S	%	T	S	%	T	S	%
Physical Acts Against Persons.....	28	16	54	11	8	73	28	24	86	55	44	80
Verbal Acts Against Persons.....	3	3	100							6	6	100
Physical Acts Against Activities...	8	6	75	3	3	100	7	5	71	5	4	80
Verbal Acts Against Activities...							1	1	100			

a/T -- tried
S -- successful
% -- percentage of success

Frequency of various kinds of aggressive acts.-- Of the 155 aggressive acts, 131 were directed against persons and 24

against the activities and play materials of other children. Of the 131 acts directed against persons, 122 were physical and nine were verbal. Only one of the acts directed against activities was verbal; the other 23 were physical. The majority of all the aggressive acts were physical; 145 out of 155 possible acts.

From this analysis, it can be seen that teachers interfered most frequently in aggressive acts of the physical type. This finding would seem in agreement with that of other investigators who found that conflicts of young children were primarily physical in nature and although they are quite brief, they tend to be violent and often require adult intervention to prevent serious harm to the victim.

Frequency of use of various teacher-treatments.-- Interpretations were used most frequently for physical acts against persons and next most often for verbal acts against persons. Physical treatment was used most often for physical acts against persons and next most often for physical acts against activities.

Effectiveness of treatments in relation to kinds of aggressive acts.-- In the analysis of the effectiveness of treatments used for specific types of aggressive acts, all treatments were 100 percent successful when used for verbal acts of aggression. In the treatment of physical acts of aggression, suggestions and interpretations were practically

equally effective; 83 and 80 percent successful, respectively.

It is evident that the treatments that were used most frequently were not always the most effective. Suggestions and interpretations were equally effective; 83 and 82 percent, respectively, however interpretations came first on the usage list and suggestions, third. Although physical treatments came second on the usage list, they were found to be least effective (64 percent). Simple commands were used least but were 79 percent effective. It is difficult to account for the fact that physical treatments were used so frequently in spite of the fact that they were so seldom successful. It is possible that teachers of young children often have to use physical treatments as emergency techniques to prevent children from hurting each other during the violent quarrels that are so much a part of the social play of pre-school age children.

Results.-- The results of this study show that teaching techniques were most effective for older children, for girls, and during the second semester; and that the most effective treatments used by teachers for acts of anti-social aggression were suggestions and interpretations. A generalized interpretation of these results would seem to indicate that they are very much in agreement with the basic values of nursery school experience, where the major emphasis is on learning to share, take turns, and get along with one's peers.

CHAPTER V

SUMMARY

Purpose of the study.-- The purpose of this study was to gain a broader understanding of the aggressive behavior of young children and of nursery school teachers' methods of dealing with it.

Description of the experiment.-- An experiment was set up to test the effectiveness of teaching techniques on the aggressive behavior of four-year-olds in the nursery school. The experiment concerned itself with only the anti-social types of aggressive acts directed against other children or their activities.

The investigation was carried on, over a ten month period of time, in the four-year-old group of a nursery school. The group consisted of 18 children, nine boys and nine girls; with an average age, at the mid-point of the study, of four years and five months. The majority of the parents of these children were engaged in business or professional careers. The staff consisted of one teacher and three student-teachers. The school, used in this study, was a small private nursery school, located in a suburban community.

Direct observation was the method used for the experiment. During the recordings, the situation, aggressive act,

and teacher's treatment were described as fully as possible on a mimeographed form. Results were classified as successful or unsuccessful. An incident was considered to have been treated successfully if the child ceased and did not immediately go on to another aggressive act. The term, anti-social aggression, was used to denote any verbal or physical behavior on the part of a child, that was directed against the person or activities of another child or group of children. The investigator recorded 155 acts of anti-social aggression, which were treated successfully or unsuccessfully by teachers in the four-year-old group of the nursery school, over a ten month period of time.

The investigator found that there were four general classifications of treatments used by teachers (1) physical treatment, help or restraint (2) simple commands (3) suggestions of things to do (4) interpretations. Aggressive acts were divided into four classifications (1) physical acts directed against persons (2) verbal acts directed against persons (3) physical acts directed against the activities of persons (4) verbal acts directed against the activities of persons. Results were classified as successful or unsuccessful, according to the immediate effectiveness of treatments.

Conclusions.-- An analysis of the data showed that interpretations were used most frequently for all ages, both sexes, and at all times; but they were only most effective with older

children and with girls, possibly because interpretations involve an understanding of the feelings and purposes of others and more mature children would be able to respond better.

In general, teaching techniques were used most often for younger children, for boys, and during the first semester; but were completely reversed in effectiveness. That teachers were most effective in treating the aggressive behavior of older children, of girls, and during the second semester would again seem to indicate that maturity and length of nursery school experience were factors which contributed to the success of the teacher's treatment of aggressive behavior.

In the analysis of the effectiveness of treatments used for specific types of aggressive acts, all treatments were 100 percent successful when used for acts of verbal aggression. However, the number of verbal acts was comparatively small; 10 out of 155. Suggestions and interpretations were equally effective in the treatment of physical acts of anti-social aggression; 83 and 80 percent, respectively.

The data also showed that the treatments used most frequently were not always the most effective. Suggestions and interpretations were equally effective for all kinds of aggressive acts (83 and 82 percent, respectively), but although interpretations were used most frequently, suggestions came third on the usage list. Physical treatments came second on the usage list, but were found to be least effective (64 percent). That teachers used physical treatment so frequently,

in spite of its ineffectiveness, seems to indicate that nursery-school teachers often have to use physical treatments as emergency techniques in order to prevent children from seriously injuring one another during the violent quarrels that are so much a part of the socialization process of young children.

The two most effective treatments used by teachers, suggestions and interpretations, are very much in agreement with the general philosophy of nursery-school teachers whose aim it is to provide acceptable outlets for aggressive feelings, make suggestions, interpret situations, and help children learn to share, take turns, and get along with other children of similar age.

Limitations of this study.-- There are many limitations to this study. The sampling is small, being limited to one group of four-year-olds in a single nursery school. It is difficult to measure emotional behavior and , therefore, only the outward manifestations of anti-social aggression or the aggressive acts could be recorded.

A recording of the treatments given by teachers were also limited by many factors. Only tangible techniques, as evidenced by verbal or physical treatment, could be recorded; whereas the teacher-child relationship, which is often an influential factor in itself, could not be measured. In most cases, a combination of treatments was used by teachers, and often rather arbitrary decisions had to be made to determine

which treatment was the dominant one of the combination.

In addition, the data are likely to be biased because the author, who was teacher of the group, used her own methods of treatment as part of the observations. Because she firmly believes in the values of these methods, and because she has attained a certain skill in using them, she is most likely to use them more frequently and more often successfully than another teacher might do.

Suggestions for further research.-- More research needs to be done on this subject. It would be valuable to test the long range effectiveness of teaching techniques used to treat the aggressive behavior of nursery-school children. Also, a study could be made, relating the personality of the teacher to her effectiveness in dealing with the aggressive behavior of nursery-school children; because most of the previous research tended to show that the teacher-child relationship was often more important than any of the techniques they used in dealing with aggressive behavior. Therefore, research needs to be done to determine what constitutes a desirable teacher-child relationship in the nursery school.

APPENDIX

NAME	DATE	SITUATION	AGGRESSIVE ACT	TEACHER'S TREATMENT	RESULT
Nellie	10/16	Water-play	Pushed Amy away from sink and grabbed teapot away from her and threw it on the floor.	Teacher moved near. Amy slapped Nellie and grabbed the teapot back.	Successful
Ralph	10/24	Getting up from Rest (mats were being put away)	Ralph pushed Alice into her cubby and held her there; pressing her quite viciously, hurting and frightening her.	When teacher noticed it, she removed Ralph and told him that it hurt Alice very much. She also comforted Alice.	Unsuccessful
Howard	10/25	Raking leaves	Hit Ralph with rake when Ralph was raking near him and their rakes became entangled accidentally.	Teacher explained that it was accidental and that Ralph was not trying to take away Howard's rake.	Unsuccessful
Nellie	11/13	Clay	Nellie hit Norma on the head with clay several times.	Teacher said, "Keep the clay on the clay-board, Nellie."	Successful

NAME	DATE	SITUATION	AGGRESSIVE ACT	TEACHER'S TREATMENT	RESULT
Howard	11/19	Yard play	Howard wanted the wagon but Amy was using it. He tried to push her out and when she held her own, he bit her.	Teacher called firmly, "No," also removed him physically, saying: "Biting hurts. If you want to use the wagon, ask Amy if you can have a turn with it. Come, I'll help you ask her." Amy refused him and the teacher said: "Amy says 'not now'. Amy, you mean you're using it now....a little later, when you're through?" Amy agreed.	Successful
Amy	1/31	Painting	Amy painted on Natalie's arm and kept on painting even when Natalie asked her to stop. Amy shook a brush-ful of paint into her face. (Natalie had taken the color that Amy wanted)	Teacher said: "I know you are angry with Natalie because you wanted that c an of paint, but you could have asked me to fix you another one. Natalie doesn't like to have paint splashed over her face. Remember to ask me next time." (Teacher fixed Amy a can of the desired color of paint).	Successful

NAME	DATE	SITUATION	AGGRESSIVE ACT	TEACHER'S TREATMENT	RESULT
Howard	3/4	Yard Play	Impulsively, without provocation grabbed Mickey and jumped on his back, knocking him down, yelling, and punching him wildly with his fists.	Teacher removed him, saying: "You feel like punching, but that hurts Mickey. Come, let's get the punching bag. You can punch it all you want to. It's just made of old stuffed cotton. It doesn't have feelings so you can punch it as much as you like....hard too."	Successful
Neil	4/22	Cowboy Play	Neil grabbed at Arthur as he ran by and pushed him, saying: "Mrs. Teacher, they're getting too wild."	Teacher told 'cowboys' to settle down a bit, that Neil wasn't playing their game and didn't like to be pushed. She suggested that all the 'cowboys' and Neil work together to put more boards on their 'shack' roof. She provided a blanket for a roof.	Successful

BIBLIOGRAPHY

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Alschuler, Rose H., and LaBerta Weiss Hattwick, Painting and Personality, University of Chicago Press, Chicago, 1947.

Appel, Madeleine Hunt, "Aggressive Behavior of Nursery School Children and Adult Procedures in Dealing with such Behavior," Journal of Experimental Education (December, 1942) 11:185-199.

Association for Supervision and Curriculum Development, Fostering Mental Health in Our Schools, 1950 Yearbook, National Education Association, Washington, D.C.

Axline, Virginia May, Play Therapy, Houghton Mifflin, Boston, 1947.

Bacmeister, Rhoda W., All in the Family, Appleton-Century-Crofts, New York, 1951.

Bacmeister, Rhoda W., Your Child and Other People, Little, Brown and Company, Boston, 1950.

Baruch, Dorothy W., "Aggression During Doll Play in a Preschool," The American Journal of Orthopsychiatry (April, 1941), 11:252-259.

Baruch, Dorothy Walter, New Ways in Discipline, Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1949.

Baruch, Dorothy Walter, Parents and Children Go to School, Scott, Foresman and Company, Chicago, 1939.

Biber, Barbara, How Can Nursery School be Expected to Benefit a Child?, New York State Association for Nursery Education, New York, 1949.

Blatz, William E., Understanding the Young Child, William Morrow and Company, New York, 1944.

Boynton, Marjorie, Evaluation of Three Teacher Techniques in the Socialization Process of Eighty-Five Nursery School Children, Unpublished masters thesis, Boston University School of Education, 1948.

Caille, Ruth Kennedy, Resistant Behavior of Preschool Children, 1933, Number 11, Child Development Monographs, Bureau of Publications, Teachers College Columbia University, New York.

Caner, G. Colket, It's How You Take It, Coward-McCann, Inc., New York, 1946.

Carmichael, Leonard, Manual of Child Psychology, John Wiley and Sons, Inc., New York, 1946.

Curwood, Sarah T., Social Relations of Three Year Old Children in a Nursery School, Unpublished masters thesis, Boston University School of Education, 1947.

Dawe, Helen C., "An Analysis of Two Hundred Quarrels of Preschool Children," Child Development (June, 1934),5:139-157.

Dollard, John, and Leonard W. Doob, Neal E. Miller, O. H. Mowrer, Robert R. Sears, Frustration and Aggression, Yale University Press, New Haven, 1939.

Fenton, Norman, Mental Hygiene in School Practice, Stanford University Press, Stanford, California, 1943.

Fite, Mary Delafield, "Aggressive Behavior in Young Children and Children's Attitudes Toward Aggression," Genetic Psychology Monographs (May, 1940), 22:151-319.

Frank, Lawrence K., "The Fundamental Needs of the Child," Mental Hygiene (July, 1938).

Frank, Mary, and Lawrence K. Frank, How to Help Your Child in School, The Viking Press, New York, 1950.

Freud, Anna, "Psychoanalysis and the Training of the Young Child," The Psychoanalytic Quarterly (January, 1935), Volume 14, Number 1, New York.

Gesell, Arnold, and Frances L. Ilg, Infant and Child in the Culture of Today, Harper and Brothers Publishers, New York, 1943.

Gesell, Arnold, The First Five Years of Life, Harper and Brothers Publishers, New York, 1940.

Goodenough, Florence L., Anger in Young Children, Institute of Child Welfare, Monograph Series Number 9, The University of Minnesota Press, Minneapolis, 1931.

Goodman, Cecile Cohen, The Role of the Nursery School Teacher in Developing Social from Anti-Social Behavior, Unpublished masters thesis, Boston University School of Education, 1947.

Green, Elise Hart, "Friendships and Quarrels Among Preschool Children," Child Development (September, 1933), 4:237-252.

Green, Elise Hart, "Group Play and Quarreling Among Preschool Children," Child Development (December, 1933), 4:302-309.

Hartley, Ruth E., and Lawrence K. Frank, Robert M. Goldenson, Understanding Children's Play, Columbia University Press, New York, 1952.

Hattwick, Berta Weiss, "The Influence of Nursery School Attendance upon the Behavior and Personality of the Preschool Child," The Journal of Experimental Education (June, 1937), 5:180-190.

Hattwick, LaBerta A., "Sex Differences in Behavior of Nursery School Children," Child Development (December, 1937), 8:343-355.

Hymes, James L., Jr., Understanding Your Child, Prentice-Hall, Inc., New York, 1952.

Isaacs, Susan, Social Development in Young Children, Harcourt, Brace and Company, New York, 1937.

Isaacs, Susan, The Children We Teach, University of London Press, Ltd., 1937.

Isaacs, Susan, The Nursery Years, The Vanguard Press, New York, 1938.

Jersild, Arthur T., Child Psychology, Prentice-Hall, Inc., New York, 1940.

Jersild, Arthur T., and Frances V. Markey, Conflicts Between Preschool Children, 1935, Child Development Monographs, Number 21, Bureau of Publications, Teachers College Columbia University, New York.

Josselyn, Irene M., Psychosocial Development of Children, Family Service Association of America, New York, 1948.

Lorand, Sandor, Psychoanalysis Today, International University Press, New York, 1944.

Menninger, Karl, Love Against Hate, Harcourt, Brace and Company, New York, 1942.

Murphy, Gardner, and Lois B. Murphy, Theodore M. Newcomb, Experimental Social Psychology, Harper Brothers, New York, 1937.

Murphy, Lois Barclay, Social Behavior and Child Personality, Columbia University Press, New York, 1937.

Muste, Myra J., and Doris F. Sharpe, "Some Influential Factors in the Determination of Aggressive Behavior in Preschool Children," Child Development (1947), 18:11-28.

Read, Katherine H., The Nursery School, W. B. Saunders Company, Philadelphia, 1950.

Reynolds, Martha May, Children from Seed to Saplings, McGraw-Hill Book Company, Inc., New York, 1951.

Ribble, Margaret A., The Rights of Infants, Columbia University Press, New York, 1943.

Roff, Merrill, and Louise Roff, "An Analysis of the Variance of Conflict Behavior in Preschool Children," Child Development(March, 1940), 11:43-60.

Seabury, David, Growing into Life, Horace Liverright, New York, 1928.

Searl, M. N., "Play, Reality and Aggression," The International Journal of Psycho-Analysis (July, 1933), Volume 14, Part 3.

Sears, Robert R., "Spare the Rod?", Harvard Alumni Bulletin, (February 10, 1951).

Shaw, Ruth, Finger Painting, Little Brown, Boston, 1938.

Spock, Benjamin, A Commonsense Book of Baby and Child Care, Sloan and Pearce, New York, 1946.

Stephen, Karin, "Aggression in Early Childhood," British Journal of Medical Psychology (1939), 18:178-190.

Subcommittee on Day Care Standards and Licensing Procedures, Recommended Minimum and Preferred Standards for Agencies Giving Day Care to Children under Seven Years of Age, Massachusetts Department of Public Health, 1952.

Symonds, Percival M., The Dynamics of Parent-Child Relationships, Bureau of Publications, Teachers College Columbia University, New York, 1949.

Teagarden, Florence M., Child Psychology for Professional Workers, Prentice-Hall, Inc., New York, 1946.

Thorpe, Louis P., Child Psychology and Development, The Ronald Press Company, New York, 1946.

Travis, Lee Edward, and Dorothy Walter Baruch, Personal Problems of Everyday Life, S. Appleton-Century Company, New York, 1941.

Washburn, Ruth Wendell, Children Have Their Reasons, D. Appleton-Century Company, New York, 1942.

Washburn, Ruth Wendell, Children Know Their Friends, William Morrow and Company, New York, 1949.

Winn, Ralph, Encyclopedia of Child Guidance, The Philosophical Library, New York, 1943.

Wolff, Werner, The Personality of the Preschool Child, Grune and Stratton, New York, 1946.