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Karen Joyce Smalley for the M. S. in Family Life and
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Title INFLUENCE TECHNIQUES USED IN NURSERY SCHOOL TO
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The major purpose of this study was to determine if there was a relationship between the power of the influence techniques used by a teacher in a nursery school setting and the response of the children to these techniques.

The subjects were sixteen nursery school children and two trained nursery school teachers at the Fruit and Flower Day Nursery in Portland, Oregon. The children were divided into two groups of younger and older four-year-olds, ten children in the younger group and six children in the older group. The mean age of the younger group on the last day of observation was 51 months. The mean age of the older group was 58 months.

Systematic observation was used as the method of measurement. This involved a preconceived category system, developed as a check

list, to measure all interactions between the teacher and the child where the teacher tried to modify the child's ongoing behavior by the use of an influence technique. The category system consisted of three power categories for the teacher: high, moderate, and low; and three response categories for the child: immediate compliance, qualified compliance, and non-compliance.

Observations were taken for seven days from 8:30 A. M. to 1:00 P. M. and from 3:00 P. M to 5:00 P. M. Each teacher was observed alternately for an hour giving a total of 22 hours and 45 minutes of observation per teacher.

The reliability of individual categories of behavior, and of the observer in general, were demonstrated by a measure of percent agreement between two independent judges before observation for purposes of data collection were undertaken.

The data were analyzed by the chi-square analysis to determine if there was a relationship between the response of the children and the power of the influence technique used by the teacher. A descriptive, interpretive analysis of the direction of this relationship was also made.

The results of the chi-square analysis indicated clearly that there was a relationship between the power of the influence technique used by the teacher and the response of the child to this technique. When high power techniques were used there was a strong tendency

for the child to comply immediately. However, when the response was not immediate compliance, it tended to be non-compliance nearly as often as it was qualified compliance. When moderate power techniques were used there also was a tendency to comply immediately. When immediate compliance was absent there was a slightly greater tendency to comply in a qualified manner than not comply at all. With low power techniques, non-compliance was the most frequent response.

Although this study does not attempt to determine the psychological results of influence-techniques, studies have shown that high power influence-techniques tend to produce such results as accumulation of hostile tensions, needs to be power assertive and heightened autonomy needs. In contrast, moderate and low power techniques not only eliminate these consequences, but also help the child develop his own internal controls and help him understand the consequences of his actions. From this point of view the moderate power techniques are probably to be preferred.

INFLUENCE-TECHNIQUES USED IN NURSERY SCHOOL
TO MODIFY THE BEHAVIOR OF CHILDREN

by

KAREN JOYCE SMALLEY

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APPROVED:

Redacted for Privacy

Associate Professor of Department of Family Life

In Charge of Major

Redacted for Privacy

Head of Department of Family Life

Redacted for Privacy

Dean of Graduate School

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INFLUENCE-TECHNIQUES USED IN NURSERY SCHOOL TO MODIFY THE BEHAVIOR OF CHILDREN

INTRODUCTION

Statement of the Problem

"Why does an individual behave as he does?" This is a persistent, complex and largely unanswered question. Today it is realized that answers to complex questions of behavior can no longer be sought in terms of a single variable. The interdependence of co-existing factors, the reality of the social space in which the individual lives and the importance of the subjective or personal meaning of the situation in determining an individual's behavior must be taken into account. Even one facet of behavior, such as the influence of one individual upon another, shades into such complexities that it is for practical purposes too fine or too involved to be easily discovered.

Recognizing these limitations, however, clinical investigations do show that experimentally created atmospheres over a short period of time produce marked effects on the behavior of children (12, p. 271-299). If this is the case it would seem likely that psychological atmospheres operating over a long period of time would be of major significance in determining differences in behavior and attitudes.

One important facet of the psychological atmosphere for children

is the influence which others bring to bear upon them verbally. It has been recognized for centuries, largely on an intuitive basis, that behavior and personality are modified by the speech of others and that special care should therefore be used in addressing verbal directions to children. This was evident in 1853 when the Reverend James O. Andrew (3, p. 92-94) advised parents to take some pains and trouble in explaining matters to children, and to let their commands be reasonable and wisely adapted to age and time and circumstance. Abbott (1, p. 68-69), writing at a time when the absolute obedience of children was expected, advocated using careful thought in giving commands, and allowing children the greatest freedom possible.

More recently the professional literature on child training has offered essentially the same advice as that of Andrew and Abbott. Thom (22, p. 133), in stating rules for obedience, writes that few commands should be given and when they are that they should be clear and simple--with reason--whenever possible, that they should be positive rather than negative, and that they should be consistently enforced. Blatz and Bott (4, p. 25) suggest that adults make as few absolute demands as possible. Faegre (6, p. 164) agreeing with this, has also emphasized the need to provide reasonable explanations.

These "guidance principles" have been verified in part by studies reported throughout the literature on the effect of verbal suggestion on children. For example, Johnson (11, p. 276-290) has found

that positive, unhurrying, specific and encouraging types of instructions are more effective with children than negative, hurrying, general and discouraging types. McClure (14, p. 276-290) has also found that encouragement is more effective than discouragement and has concluded that positive commands are probably, though not certainly, more effective than negative commands. Moore (15, p. 185-201) has found that the median length of time a child takes in responding to a suggestion is shorter than the time taken in response to commands and requests. No conclusions are drawn, however, as to the relative effectiveness of the two methods. Vaughn (23, p. 160-168) has found that detailed instruction, either in positive or negative form, tends to increase desirable response and decrease undesirable response, but that negative instruction is slightly superior to positive instruction in reducing undesirable response. He was also able to conclude that the explanation of reasons for making or not making a particular response seemed to have no effect on children's behavior.

On the basis of these data it becomes clear that whereas most of the writers on practical child training consider positive suggestions and requests with explanation superior to commands, there is some disagreement in experimental studies as to the relative effectiveness of the two methods. As these principles of child management abound in the literature the question inevitably arises: to what extent are these suggested practices justified? Does a child actually respond

better to suggestions than to commands? What are the consequences of these different types of verbal instruction upon children?

Recently efforts to answer these questions have resulted in the conceptualization by Sigel et. al. (19, p. 3-16) of commands, suggestions, and requests by adults of children as "influence-techniques". These authors have defined an influence-technique as any overt action by an adult which is used to modify the ongoing behavior of a child. The discussion which follows is taken largely from Sigel's conceptualization. However, the earlier work in this area by Anderson (2, p. 287-385), as it appears in the classroom, will also be drawn upon.

Influence-techniques can be divided into two major categories: high power or dominative techniques and low power or integrative techniques. Anderson (2, p. 287-385) has found that when teachers used techniques which are dominative they tend to produce domination amongst children in the classroom while the use of techniques which are integrative tends to produce integrative behavior amongst children. One reason for this may be that domination is likely to involve influence-techniques that are characteristically "high" in power and that integration is likely to involve influence-techniques that are low or moderate in power. It could be argued that these are different and unrelated means of responding to a child, for domination involves contacts in which the behavior of the child is determined by the judgement of the teacher, whereas in integrative contacts the behavior of the child

is determined partially or wholly by the judgement of the child himself.

According to Hoffman, Sigel, et. al. (10, p. 17-33) influence-techniques have potentiality of creating various psychological states for a child: for example, a command which conveys to a child how his behavior must be modified is psychologically different than attempting to modify his behavior through persuasion or suggestion with an explanation. This is true whether or not the child's behavior which follows the influence-technique is congruent with what is desired by the teacher. The psychological consequences of influence-techniques have been broadly conceptualized by Hoffman and provide the basis for the following discussion.

Dominative or high power techniques are those which convey to the child that in spite of his wishes he must stop what he is doing and without question do what an adult wishes. The adult does not compensate the child for having to alter his behavior or attempt an explanation for his demand. Nor does the adult allow the child to call upon his own wishes or internalized controls to help alter his behavior. Consequently, dominative techniques rely for their effectiveness primarily on the high degree of external coercive pressure they put on the child to comply. From the standpoint of the child this is a demand for unconditional surrender of his own interest and involvement. Tendencies to oppose and feelings of hostility should therefore be aroused.

It follows that the frequent use of dominative techniques should lead to the accumulation of hostile tension, needs to be power assertive toward others and heightened autonomy needs.

In contrast, low or moderate power techniques which are integrative in nature have their effect by inducing the child to want to do what is expected rather than being coerced into compliance. These may indeed be attempts to manipulate the child's need system by making the desired behavior attractive for the child and by various methods of distraction. However, integrative techniques are those which give an explanation to the child why he cannot behave the way he wishes or those which give an explanation of the consequences of his behavior. These techniques may also give the child a choice of complying or not. As a result they help a child develop his own internal controls and help him understand the consequences of his actions. They should arouse considerably less need for power assertiveness or feelings of hostile tension than dominative techniques.

While the above authors have investigated the power of parental influence-techniques and the psychological results of these upon the child, and the effects of dominative and integrative behavior in the classroom, no study has yet attempted to determine the power of the influence-techniques used by nursery school teachers and the response of children to these techniques. This is the aim of the present study, though no attempt has been made to investigate the psychological

results that derive from the use of various influence techniques in the nursery school. The focus of the study is on the distribution of high, moderate and low power techniques by nursery school teachers and the response of children to these techniques.

Review of Related Literature

The term "influence-technique" was coined by Redl and Wineman (16, p. 153-245) in their discussion of the therapeutic importance of the appropriate use of these techniques by counselors. The term is most often defined as an overt act by an adult which is used to modify specific behavior of a child.

Sigel and Hoffman (20, p. 261-264) were the first to define two distinct classes of influence-techniques. They felt that there are positive oriented techniques that have their effect by inducing the child to want to do what is expected, rather than being coerced into compliance, and there are negative oriented techniques which have their effect by demanding immediate compliance. In developing a theory of influence-techniques, Sigel, et. al. (19, p. 3-16) felt that the assumption that feelings are more important than actions with children needed serious re-evaluation for it implies that overt adult behavior has little significance in the study of child development. These authors, however, felt that it is reasonable to assume that a child's development can be significantly affected by overt adult behavior which may

deprive the child, interrupt his activities, force him to behave, or facilitate his overcoming obstacles. This class of overt behavior which they chose to study was labeled influence-techniques. Through the study of these techniques they felt they could answer such questions as:

- (1) What kinds of influence-techniques do parents use to modify the ongoing or anticipated behavior of the child?
- (2) What are the psychological, cultural and situational variables which are related to influence-technique use?
- (3) What are the consequences of such practices for the developing personality of the child?

The authors felt that the concept of influence-techniques would be relevant to the study of a variety of adult-child interactions, including those of teacher-child, therapist-child, pediatrician-patient and others.

Later, the above authors undertook an extensive study of the influence-techniques that parents used to modify the behavior of children (18, p. 356-364). Underlying this study was the assumption that the techniques used by parents to modify the behavior of children were largely responsible for setting the tone of the parent-child relationship. They hoped to find through this study the types of influence-techniques parents of pre-school children use, what psycho-social factors predispose parents to perceive situations in which they act as they do when they do, and the consequences of the parental practices for the

psycho-social functioning of the child.

Influence technique patterns of parents were obtained through an interview in which the parent was required to give a detailed description of an entire day in the life of the parent and the child. Additional material concerning the parents' influence behavior was obtained from a paper and pencil questionnaire. By means of single case analysis the authors pointed out suggestive relationships between the parent personalities and their influence-techniques and between influence-techniques and patterns of child behavior.

Using these data, Hoffman (8, 1. 129-143) studied power assertions by parents and their impact on children. He proposed that power was manifested overtly in influence-techniques and that the kind of technique a person used is determined by his power position. He found that working class fathers used more initial and unqualified power assertions than middle class fathers. Differences between working and middle class mothers were obtained only in initial unqualified power assertions.

In regard to the effects on the child's personality development, the findings of this study indicated that unqualified power assertions play an important role when used by mothers under conditions of maximum involvement, such as when the child has already resisted a previous influence-technique. Considerable support is given the hypothesis that the frequent use of unqualified power assertions under these

conditions contribute to the development of hostility, power needs, and heightened autonomy strivings which the child displaces toward peers and, to a lesser extent, toward permissive authority figures.

An important implication of this research is that studies of the effects of child-rearing practices should, whenever possible, include data on the adult's actual overt behavior toward the child. Hoffman felt that it is insufficient to measure just personality variables and assume that these are related to overt behavior.

In a study of parent discipline in relation to the child's consideration for others, Hoffman (9, p. 573-588) hypothesized that a child would begin to alter his behavior out of consideration for others to the extent that he had a generally positive affective orientation toward others, could control his impulses, and was aware of the needs of others. It was theorized that each of these characteristics should be traceable to some aspect of the child rearing pattern: positive affect orientation should result from parental acceptance, the ability to control impulses should depend on the type of discipline used by the parents, and an awareness of the needs of others should be enhanced by the parents' use of techniques which are explicitly oriented towards the needs of others.

The parent data were obtained from tape recorded interview in which the mother reported the details of her interactions with the child during the day before the interview. Probing elicited detailed

material on the influence-techniques used by the mother, the child's behavior prior to the use of the technique and the child's response to the technique.

The child data were obtained from running account observations of each child as he behaved in nursery school.

The findings did not support the major hypothesis, that is, that parental behaviors such as acceptance of the child, discipline which highlights the consequences of the child's behavior, and discipline explicitly oriented to the needs of others, would relate positively to the child's consideration of others. Only the subsidiary hypothesis that parental acceptance would relate to positive affect in the child received support. On the basis of these data it was concluded that parental acceptance, as reflected in pleasurable non-disciplinary interaction with the child, contributes to a generally positive affective orientation toward others.

In attempting to account for the lack of support for the major hypothesis the sample was dichotomized on the basis of the mother's use of reactive unqualified power assertion and further analyzed. The results suggested four behavior systems which may be differentially influenced by parental practices: affective orientation, determined mainly by parental acceptance; hostility and related drives, instigated mainly by power assertion; impulse controls, fostered mainly by love-withholding discipline in a non-power assertive context; and

consideration for others, fostered mainly by other-oriented discipline in a non-power assertive context.

Schoggen (17, p. 42-69) observed techniques used in conflict in a study of environmental force units. This study focused upon the effort made by the child's social environment to penetrate his psychological world and to modify his behavior. An environmental force unit was defined as an action by an environmental agent which 1) occurred vis-a-vis the child, 2) was directed by the agent toward a recognizable end-state with respect to the child, and 3) was recognized as such by the child. An environmental force unit was counted as a conflict unit if there appeared to be any discrepancy between the goal set for the child by the agent and the goal which the child held. Schoggen defined three conflict units: "agent pushed", where the agent took the lead in setting a goal for the child which was clearly not attractive to the child; "agent resists", which included units in which the agent refused or resisted the demands made on him by the child; and "agent restrains", which referred to an environmental force unit where the agent tried to stop the child or prevent him from doing something he had started or planned. It was found that "agent pushed" tended to occur more frequently than either of the other two but the differences were not impressively large with children of preschool age.

Schoggen also studied the specific techniques used by agents in the instances where discrepancy occurred. It was found that the

method "makes matter-of-fact suggestion" was most commonly used and that the other methods which ranked high in frequency of use also tended to be rather mild or moderate. The findings suggested that those in the social environment took, in general, a temperate approach in attempting to modify the children's behavior. Coercion and pressure counter to the child's will appeared to be rare.

While this study used all environmental agents involved in conflict with the child, Simmons and Schoggen (21, p. 70-77) tried to determine the occurrence of conflict between parents and children only. Environmental force units were again used. The findings revealed a larger number of conflict units with mothers than with fathers but there was a wide variation with respect to individual children. In two-thirds of the conflict units mothers elicited compliance either immediately or with some delay. The use of arbitrary methods tended to be associated with a tendency to comply without delay on the part of the child.

As the literature related to teacher-child interactions covers a wide variety of areas, only those studies relating specifically to influence-techniques have been reviewed here. While currently available data on influence-techniques are scarce, what is available points clearly to their significance in child behavior. The present study was undertaken to extend our knowledge of this aspect of teacher-child relationships within the nursery school setting.

DESIGN AND PROCEDURE

Overview

This study was designed to determine the distribution of high, moderate and low power influence-techniques used by two nursery school teachers and the response of children to these techniques. A preconceived category system was used to measure all interaction between the teacher and the child where the teacher tried to modify the child's ongoing behavior by the use of an influence technique. The data were gathered in the nursery school setting, utilizing a check list designed to show the relationship between the power of the influence-technique used by the teacher and the response to the technique on the part of the child.

Subjects

The subjects were 16 nursery school children and two trained nursery school teachers. All of the children attended the Fruit and Flower Day Nursery in Portland, Oregon but were divided into two groups of younger and older fours. The mean age of the youngest group on the last day of observation was 51 months; the mean age of the older group on the last day of observation was 58 months. There were ten children in the younger group and six in the older group.

The subjects came from families of moderate income. In the majority of cases (66 percent) the children were attending the Day Nursery because the parents were divorced and the mother was working. In the rest of the cases both parents were working for financial reasons or were students at a nearby university.

During the seven days of observation maximum enrollment in the younger group was ten and the average attendance was 7.3. The maximum enrollment in the older group was six and the average attendance was 4.8

The teachers in the day care center were assured that no attempt was being made to evaluate their role as a teacher and that the researcher's interest was only in behavioral detail.

Table 1 gives the number of children in each group according to sex, average attendance and mean age.

Table 1. The Number of Children in Each Group According to Sex, Average Attendance and Mean Age.

| Group | Total Enrollment | | Total | Average Attendance | Mean Age |
|---------|------------------|---|-------|--------------------|----------|
| | M | F | | | |
| Younger | 6 | 4 | 10 | 7.3 | 51 mo. |
| Older | 2 | 4 | 6 | 4.8 | 58 mo. |

Setting

The day care center which the subjects attended is a non-sec-tarian United Fund Agency devoted to day care and pre -school training. Fees for the care of each child are based on the parent's ability to pay. The two age groups were in separate rooms which opened to the same playground. Both rooms were equipped with standard nursery school equipment.

The children arrived in the morning at approximately 8:30. At this time, weather permitting, both age groups went to the playground until 10:00 or 10:30. Generally, a structured activity was planned for those who wished to participate while the rest of the children engaged in play on large equipment or free play. From 10:00 to 11:00 the children were inside for either free or structured activity. At 11:00 a story was read, followed by clean-up for lunch and rest from 11:45 to 12:00. After lunch the children slept from 1:00 to 3:00. At 3:00 they returned outside and stayed until 4:00 or 4:30. Following this was a story or quiet activity inside until all children departed at 5:00.

Design

The focus of the study was upon interactions between the teacher and the child where influence-techniques were employed by the teacher to modify the behavior of the child. As a consequence, event sampling

(5, p. 134-157) (7, p. 147-158) was the primary sampling methodology used in the study. Systematic observation was used as the method of measurement. This involved developing a category system consisting of the power of the influence-technique used by the teacher and the response on the part of the child. Seven categories, stemming primarily from the work of Hoffman et. al. (10, p. 1-33) were involved in the system. The power of the influence-technique was divided into three categories: high, moderate and low. Compliance on the part of the child was divided into four categories: immediate compliance, resistive compliance, compromise compliance and non-compliance.

For further clarification of the category system event sampling was first taken in the form of a running record. The influence-techniques obtained in the running record were placed by two judges on a three point scale indicating high, moderate and low power techniques. These techniques were used as a criterion for determining the power of the techniques used in further sampling.

Upon completion of the development of the category system, a check list was devised for on the spot observation for purposes of data collection. The check list enabled the observer to check the child's response in relation to the power of the technique used by the teacher. The procedure used in this respect is outlined in detail in a subsequent section of the thesis.

Observations were made alternately on two teachers in the

nursery school setting until a minimum of 75 influence-techniques were obtained in each category. Only those influence-techniques were recorded which called for compliance immediately or shortly after the technique was used.

Measurement

A preconceived system of categories used in direct observation provided the basis for measurement in this study.

The Category System. Seven categories, stemming primarily from the work of Hoffman, et. al. (10, p. 1-33), were included in the system. Power of the influence-technique used by the teacher was divided into three categories: high, moderate and low. Compliance of the child also was divided into three categories: immediate compliance, resistive compliance and compromise compliance. The seventh child category was non-compliance.

Prior to the collection of the data, a sampling of all divergences between the teacher and the child where the teacher attempted to modify the child's ongoing behavior by the use of an influence-technique was taken in the form of a running record by the researcher. These records were taken for four consecutive days on alternate mornings and afternoons. Included in the running record was a brief description of the goal over which the divergence occurred, the influence-technique(s) used in the influence interaction sequence, and the child's

response to each influence-technique. In this preliminary data the influence-techniques and the child's responses were recorded in the form of both direct quotes and description of physical interaction or response.

The techniques included in the running records were placed on a three point scale by two judges according to the three categories of power. The scale is shown in Figure 1.

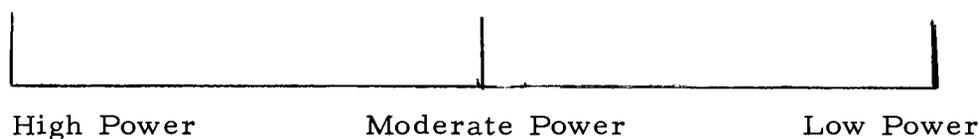


Figure 1. Scale for Determining the Power of Influence-Techniques

The purpose in scaling the techniques was to establish and refine the measurement system that was to be used. All techniques which fell into any one of the three separate power categories were used as a criterion for determining the power of the techniques obtained in further sampling.

In every instance when a teacher used an influence-technique in an attempt to modify the on-going behavior of the child, the technique and its power level was recorded. Influence-techniques can occur only when there appears to be a divergence between the goal of the

teacher and the goal of the child and where the teacher uses the potential power she has to attempt to compel the child to behave in a manner which she desires.

Only those influence-techniques which attempted to modify the child's on-the-spot behavior were recorded, thus limiting the time focus of the present study to techniques which call for compliance shortly after the technique was used.

The child categories were designed to enable the observer to record systematically the child's compliance or non-compliance in response to the power of the technique used by the teacher.

A brief definition of the categories used in the study will be found in Table 2. Detailed definitions of the categories and examples may be found in Appendix A. Relevant terminology may be found in Appendix B.

The Recording System. After preliminary experimentation in observation a check list was devised which provided space for recording the child's response in relation to the power of the technique used by the teacher. An example of the check list appears as Figure 2.

Table 2. Categories Used in the Observational System

| Influence Technique Categories (Teacher) | |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High Power | High power techniques are those which without qualification put direct coercive pressure on the child to change his entire ongoing pattern of behavior immediately. These techniques are exemplified by direct commands, threats, and deprivations. |
| Moderate Power | Moderate power techniques differ from high power techniques in that they are qualified by explanations or attempts to justify the required behavior. |
| Low Power | Low power techniques are those which do not invoke authority but instead rely for their effectiveness primarily on the child's own internalized standards. Such techniques communicate to the child the behavior change desired and also indicate that he has a choice of complying or not. |
| Response Categories (Child) | |
| Immediate Compliance | The child yields immediately to the teacher's attempt to modify his behavior through the use of an influence-technique. |
| Resistive Compliance | The child may comply immediately or after a slight delay, but cues given by the child such as facial expression, language, body movement and tension indicates that the child does not wish to comply. |
| Compromise Compliance | The child complies to the teacher's wishes but only partially. He appears to compromise by carrying out only a part of her wish. |
| Non-compliance | The child fails to respond to the teacher's attempt to modify his behavior. |

| | Compliance | Immediate | Resistive | Compromise | Non-Compromise |
|----------|------------|-----------|-----------|------------|----------------|
| Power | | | | | |
| High | | | | | |
| Moderate | | | | | |
| Low | 1 | ✓ | | | |

Figure 2. The Check List Showing a Low Power Influence-Technique with Immediate Compliance

The three categories of power, as they have been defined previously, are listed vertically along the left hand side of the check list. Compliance and non-compliance are listed horizontally across the top of the check list. As an influence interaction sequence occurred, the power of each influence-technique was categorized. At the termination of the sequence the compliance or non-compliance by the child in response to the technique was checked. For example, if a teacher began by saying, "Frank, if you turn the block sideways it won't tip over," and in response Frank immediately turned the block sideways, the influence interaction sequence would be classified as a low power

technique getting immediate compliance. The low power category would be marked "1" and a check would be placed in the immediate compliance column. This is illustrated in Figure 2. Another example would be when the teacher says "Bob, I can't let you play with the blocks during story time. When you do, the rest of the children can't hear." In response, Bob continues to build with the blocks. This would be classified as a moderate power influence-technique followed by non-compliance. Getting no compliance initially the teacher may then say, "Bob, you must stop playing with the blocks now," shifting to a high powered technique. The child still fails to comply. The teacher says one again "You must stop now," and after using the second high power technique, takes the child by the hand and leads him away. The child begins to cry but goes with the teacher. This was classified as resistive compliance, terminating the influence interaction sequence. In this case the moderate power category was numbered "1" and the high power categories were numbered "2" and "3". Resistive compliance was checked following the third power entry. In this instance the check list would be marked as shown in Figure 3.

In any instance where a response was not checked following an influence-technique it was assumed that non-compliance was involved.

From the check list the researcher can determine the power orientation of a teacher by counting the number of checks occurring in the power categories on the left hand side of the check list. One can

| | | Compliance | Immediate | Resistive | Compromise | Non-Compliance |
|------|----------|------------|-----------|-----------|------------|----------------|
| | | Power | | | | |
| High | 23 | | | ✓ | | |
| | Moderate | 1 | | | | |
| Low | | | | | | |

Figure 3. The Check List Showing An Influence Interaction Sequence.

also determine a child's response to the use of power by noting the compliance and non-compliance in relation to the last number in the power column.

Reliability of Observation. As soon as the categories were constructed, two observers committed the category definitions to memory. Reliability was checked in observation at the Fruit and Flower Day Care Center by two observers observing simultaneously but independently using the check list described above.

Reliability was demonstrated for each category within the system. Ninety interacts were observed and 108 influence-techniques were recorded within these interacts.

The check list of the two observers were analyzed to determine the consistency with which they agreed on the placement of behaviors into the seven categories. Reliability was demonstrated for individual categories and for observers generally. In both cases percent agreement on category entries between observers provided the measure of reliability.

The formula used in calculating individual category reliability was:

$$\frac{\text{Number of agreements}}{\text{Number of agreements} + \text{disagreements due to misclassification}}$$

These data appear in Table 3.

Table 3. Reliability of Individual Categories Based on the Observation of 108 Influence-Techniques Used in 90 Teacher-Child Interactions

| Categories | Total Agreement | Misclassifications Observers | | Omissions Observers | | Percent Agreement |
|-----------------------|-----------------|------------------------------|---|---------------------|---|-------------------|
| | | A | B | A | B | |
| Immediate Compliance | 79 | 2 | 3 | 0 | 3 | 94 |
| Resistive Compliance | 12 | 1 | 2 | 0 | 2 | 80 |
| Compromise Compliance | 2 | 2 | 1 | 0 | 1 | 40 |
| Non-Compliance | 14 | 2 | 1 | 0 | 2 | 82 |
| High Power | 41 | 3 | 6 | 0 | 2 | 82 |
| Moderate Power | 25 | 6 | 3 | 0 | 0 | 74 |
| Low Power | 24 | 0 | 0 | 0 | 2 | 100 |

On the basis of these data it was concluded that all categories except compromise compliance were sufficiently defined to allow accurate, reliable classification. It will be noted from these data that compromise compliance had a percent agreement of only 40 percent. However, the small number of entries in this category did not permit an adequate reliability check. Since this category occurred so seldom, it was combined with resistive compliance, making a combined category called qualified compliance. The percent agreement of these combined categories was 70. In future reference these two categories will be referred to separately on a descriptive basis, but will be combined into qualified compliance for analysis and discussion.

Overall reliability was based on the formula:

$$\frac{\text{Number of Agreements}}{\text{Number of Agreements} + \frac{1}{2} \text{ Disagreements due to Misclassification} + \text{Disagreements Due to Omission.}}$$

Only half the errors due to misclassification entered into the formula since an error in misclassification for one category was also tabulated as an error in misclassification for another category.

If an interact was omitted it was counted as a disagreement due to omission in the category which was omitted.

Using this formula, over-all reliability was calculated to be 88 percent. Observer reliability was not rechecked during the course of the study.

Procedure

Observations for the final data were taken for seven days from 8:30 A. M. to 1:00 P. M. , and from 3:00 P. M. to 5:00 P. M. All interactions of a teacher with a child were observed throughout the day except during rest time from 1:00 to 3:00. Observations continued until a minimum of 75 low power techniques were recorded. This number was arbitrarily set as the minimum required in any category for adequate analysis of the data. While 75 low power techniques were being recorded, 148 moderate power and 216 high power techniques were also recorded. Each teacher was observed alternately for a period of an hour giving a total of 22 hours and 45 minutes of observation per teacher.

Unless directly addressed the observer did not speak to the children. By sitting on a chair near the side of the room the observer attempted to make herself as inconspicuous as possible.

RESULTS AND DISCUSSION

Results

The two teachers observed used a total of 439 influence-techniques. Out of this total 216 or 49 percent of all influence-techniques were high powered. Following this in frequency was moderate power which consisted of 34 percent of all influence-techniques. Low power had the lowest frequency, totaling 17 percent. Table 4 shows the total frequency and percent of influence-techniques which were high, moderate and low.

Table 4. Percent and Number of Influence Techniques in High, Moderate and Low Power

| Power | | | | | |
|--------|---------|----------|---------|--------|---------|
| High | | Moderate | | Low | |
| Number | Percent | Number | Percent | Number | Percent |
| 216 | 49 | 148 | 34 | 75 | 17 |

The frequency of high, moderate and low power influence-techniques for teacher A and teacher B appear in Table 5. These frequencies were treated by chi-square analysis to determine if the power of the influence-techniques used by teacher A differed significantly from the power of the influence-techniques used by teacher B. The

resulting chi-square of .8279 was not significant at the .05 confidence level. Consequently, the data obtained from both teachers was combined for final analysis and interpretation.

Table 5. Frequency of Influence-Techniques for Teacher A and B

| | High | Moderate | Low |
|-----------|------|----------|-----|
| teacher A | 112 | 70 | 39 |
| teacher B | 104 | 75 | 36 |

In examining the relationship between the power of the influence-technique and the response of the child, the data were ordered according to the frequency with which particular responses on the part of the child appeared in conjunction with the influence-technique used by the teacher. These frequencies are shown on Table 6.

Table 6. Frequencies with Which Responses Appeared in Conjunction with Influence-Techniques

| Influence-Technique | Response | | | |
|---------------------|----------------------|----------------------|-----------------------|----------------|
| | Immediate Compliance | Resistive Compliance | Compromise Compliance | Non-Compliance |
| High Power | 166 | 22 | 3 | 25 |
| Moderate Power | 98 | 24 | 4 | 22 |
| Low Power | 28 | 7 | 2 | 38 |

Because of the small number of frequency counts in compromise compliance, this category was added to resistive compliance, forming a category termed qualified compliance. The frequencies with these two categories combined are shown on Table 7.

Table 7. Frequency of Child Response with Qualified and Compromise Compliance Combined.

| Influence- Technique | Immediate Compliance | Qualified Compliance | Non- Compliance |
|-------------------------|-------------------------|-------------------------|--------------------|
| High Power | 166 | 25 | 25 |
| Moderate Power | 98 | 28 | 22 |
| Low Power | 28 | 9 | 38 |

Two approaches to the analysis of the frequency count data were taken, a chi-square analysis and a descriptive, interpretive analysis based on percentages. The chi-square test of independence was applied to the data to determine if there was a significant relationship between the power of the influence technique used by the teacher and the response on the part of the child. The descriptive interpretive analysis was used to further clarify the results of the chi-square data.

The formula used in computing the chi-square statistic was:

$$X^2 = \frac{(\text{actual frequency} - \text{hypothetical frequency})^2}{\text{hypothetical frequency}}$$

where the actual frequency was the frequency observed in each cell and the hypothetical frequency was the frequency expected for each

cell. The expected frequency was found by multiplying the mean frequency for each of the three child responses by the total frequency for each influence-technique. Details of the chi-square analysis may be found in Li (13, p. 438-442).

In order to test the hypothesis that there was a significant relationship between the power of the influence-technique used by the teacher and the response on the part of the child, four chi-square tests of independence were run on the data shown in Table 7. In the first test the three child responses of immediate compliance, qualified compliance, non-compliance; and the three levels of influence-techniques were compared for their relatedness. It was found in this comparison that the chi-square value was 60.65 which was significant beyond the .001 level. This result, reported in Table 8, indicates that there is a significant relationship between the three powers of the influence-technique used by the teacher and the three child responses.

In the second test the child responses of immediate compliance and non-compliance were compared for relatedness with the three powers of the influence-techniques. The resulting chi-square, reported in Table 8, was also significant beyond the .001 level.

In the third test the child responses of qualified compliance and non-compliance were again compared for relatedness with the power of the influence-technique. The resulting chi-square was again significant beyond the .001 level.

In the last test all categories of compliance, the total of immediate and qualified compliance, were compared along with non-compliance to the three powers of the influence-technique used by the teacher. The chi-square reported on Table 8 was significant beyond the .001 level.

Table 8. Chi-square Values for the Child's Response to the Power of the Influence-Technique

| Test Number | Child Response | Degrees of Freedom | Chi-square Value | Significance Level |
|-------------|----------------------------------------------------------------|--------------------|------------------|--------------------|
| 1 | Immediate Compliance Qualified Compliance Non-compliance | 4 | 60.56 | .001 |
| 2 | Immediate Compliance Non-compliance | 2 | 57.40 | .001 |
| 3 | Qualified Compliance Non-compliance | 2 | 20.62 | .001 |
| 4 | Total Compliance Non-compliance | 2 | 57.38 | .001 |

The results of these tests indicate clearly that there is a significant relationship between the power of the influence-technique and the response of the child. From these data one must conclude that a high power technique has the propensity to produce a different response than a low power technique. In order to clarify the direction of this

relationship it is necessary to look at the percentage of responses falling in each cell.

Table 9 summarizes these data, indicating the percent of immediate, qualified and non-compliance in response to the power of the influence-technique. From this table it will be seen that 77 percent of all responses to the use of high power on the part of the teacher were immediate compliance. This indicates that not only were most of the influence-techniques used high in power, but the majority of responses to these techniques were immediate compliance on the part of the child. The percentage of qualified compliance and non-compliance in response to high power techniques were approximately equal. When a child did not comply immediately, there was a tendency to comply in a qualified manner nearly as often as to not-comply.

Table 9. Percent of Response in Relation to Power of the Influence-Technique

| Power of Technique | Response | | | Percent Total |
|-----------------------|----------------------|----------------------|---------------------------|------------------|
| | Percent Immediate | Percent Qualified | Percent Non-compliance | |
| High | 76.85 | 11.58 | 11.57 | 100 |
| Moderate | 66.22 | 18.92 | 14.86 | 100 |
| Low | 37.33 | 12.00 | 50.67 | 100 |

In Table 4 it was shown that moderate power techniques made up only about one-third of the influence-techniques used by the teacher.

It is interesting to note in Table 9 that the majority of the responses to moderate power techniques as in high power techniques were immediate compliance. However, there was a difference in moderate power techniques in qualified compliance, the percentage being slightly higher than for high power. The percentage of qualified compliance and non-compliance in response to high power techniques was exactly the same, 11.58 and 11.57 percent respectively. While a greater percentage of responses to moderate power techniques involved qualified compliance and non-compliance, the proportion of responses classified as qualified compliance exceeded those that fell into the non-compliance category. The percentages were 18.92 and 14.68 respectively. In response to moderate power techniques, there is a slightly greater tendency for a child to comply in a qualified manner than not comply at all.

Seventeen percent of the influence-techniques used by the teachers were low in power, and slightly over one-half of the responses in relation to these techniques were non-compliance. It is clear from these data that non-compliance is a much more frequent response to a low power technique than it is to any technique involving power.

In summarizing the results of this analysis, the chi-square test showed that there was a definite relationship between the power of the influence-technique and the response on the part of the child. In looking at percentages to indicate the direction of this relationship, the results showed that there was a clear tendency toward immediate

compliance when either high or moderate power techniques were used. There was a similar tendency toward non-compliance when low power techniques were used. Qualified compliance seemed to occur a bit more frequently in relation to moderate power techniques than to high power techniques.

Out of the 430 influence-techniques analyzed in these data 86 of these, or 20 percent, were used in sequence in order to attempt to obtain compliance. This involved 35 sequences, ranging from two to five steps, averaging about 2.4 steps in a sequence. Twenty-one of these sequences started at low power and progressed to high power. Eleven were of constant power, that is they involved sequences where two or more steps reflected the same level of power.

The sequential data were analyzed by the chi-square test of independence to determine if the response of the child differed with the influence-techniques which were in sequence and those which were not in sequence. For this analysis qualified compliance was added to immediate compliance to make a general category of compliance. These data appear in Table 10.

Table 10. Response to Sequential Influence-Techniques

| | Percent Compliance | Percent Non-compliance | Percent Total |
|-------------------------|-----------------------|---------------------------|------------------|
| Sequence N = 35 | 74.29 | 25.71 | 100 |
| Non-Sequence N = 356 | 92.13 | 7.86 | 100 |

The results of this analysis indicated a chi-square value of 11.86 which was significant beyond the .01 level of confidence. In viewing the percentage data in Table 10 it is clear that the influence-techniques which were in sequence brought non-compliance more often than those which were not in sequence. This result was expected since a major reason for sequential influence-techniques is the fact of non-compliance to an initial attempt to modify behavior.

Discussion

The two teachers observed during the course of this study used a total of 439 influence-techniques during 45.5 hours of observation. This was an average of approximately one influence-technique every 6.3 minutes. The largest percent of these influence-techniques were high powered. In using these techniques the teacher did not attempt to compensate the child for having to alter his behavior, nor did she attempt to explain or justify her demand. These techniques are what Anderson (2, p.293-5) has called dominative techniques and they rely for their effectiveness primarily on the high degree of external coercive pressure they put on the child to comply. However, when one considers the high percentage of times the children complied immediately with the teacher's demand, and in either a neutral or positive manner, there is clear indication that children readily accept the majority of these instructions on the part of a teacher. Undoubtedly,

many of these commands were expressed in a positive manner and used in response to a direct need on the part of the child. Many were also used to remind the child of daily routine matters which were easily accepted. However, the rather high degree of willingness to comply with these demands is startling, for with a large percentage of these demands a child has his ongoing behavior interrupted and changed in a way which gave him little choice but to comply with the adult in the way which she wished.

Hoffman (8, p. 129-143) found that the frequent use of these high power techniques contributed to the development of hostility, power needs, and heightened autonomy strivings which the child tends to displace toward peers and permissive authority figures. Other significant aspects of high power techniques were found in a later study by the same author (9, p. 573-588): those parents which frequently used high power techniques aroused a condition response of aggression and heightened autonomy needs whenever the parent acted to change the child's behavior, no matter what technique was used. It was also hypothesized that the emotional effects of high power techniques might be expected to carry over and interfere with the child response to the cognitive elements in other, less arbitrary, influence-techniques.

According to Hoffman these high power techniques,

... might thus prevent the child from attending to those aspects of reality referred to in the technique, understanding their relationship to his behavior and drawing

the appropriate action conclusion. It follows that the more power assertive the parent, the less likely is the child to assimilate the cognitive content of the parent's discipline. (9, p. 578)

It seems that an excess of high power techniques not only disrupts the child's cognitive functioning, but also leads the child to rebel against what is communicated in other techniques. Research now needs to be pursued along similar lines with respect to the influence of high power techniques used by nursery school or elementary school teachers.

Thirty-four percent of the techniques used by the teachers were moderate in power and immediate compliance to these techniques was frequent. With the use of moderate power techniques many of the consequences of the high power techniques are eliminated. When using these techniques an explanation is given, a chance for closure is allowed or a cushion is used which makes the required behavior more desirable to the child. The child has a chance to complete his task at hand and learn the reason why he must comply. It is from these techniques that the child learns when, how and perhaps why he must control his impulses, and what the consequences are of the control--or lack of control--of his actions. Theoretically, these reasons are internalized for future reference. Considering these psychological advantages and the high percent of compliance it appears that much is to be gained by using moderate power techniques.

In contrast to high and moderate power techniques, low power techniques drew the greatest proportion of non-compliance. However, if qualified and immediate compliance are added together to form a broad category of compliance, and this is compared to non-compliance, there is an almost equal tendency to comply or not comply. In this technique, when the children are given the choice of complying or not complying, there seems to be only a slight majority of non-compliant responses, although compliance may not be as immediate as it is to higher powered techniques.

In general, it can be concluded from these data that little is to be gained by using high power techniques since moderate power techniques produce compliance almost as frequently, and they are not so prone to produce negative psychological consequences. From this point of view moderate power techniques are to be preferred to the high powered ones. Low power techniques should be used only when the adult intends to allow the child a choice of complying or not.

SUMMARY AND CONCLUSIONS

Summary

The major purpose of this study was to determine if there was a relationship between the power of the influence-techniques used by a teacher in a nursery school setting and the response of the child to these techniques.

The subjects were 16 nursery school children and two trained nursery school teachers at the Fruit and Flower Day Nursery in Portland, Oregon. The children were divided into two groups of younger and older four-year-olds, ten children in the younger group and six children in the older group. The mean age of the younger group on the last day of observation was 51 months. The mean age of the older group was 58 months.

Systematic observation was used as the method of measurement. This involved a preconceived category system, developed as a check list, to measure all interactions between the teacher and the child where the teacher tried to modify the child's ongoing behavior by the use of an influence-technique. The category system consisted of three power categories for the teacher: high, moderate and low; and three response categories for the child: immediate compliance, qualified compliance, and non-compliance.

Observations were taken for seven days from 8:30 A. M. to 1:00 P. M. and from 3:00 P. M. to 5:00 P. M. Each teacher was observed alternately for an hour giving a total of 22 hours and 45 minutes of observation per teacher.

The reliability of individual categories of behavior, and of the observer in general, were demonstrated by a measure of percent agreement between two independent judges before observation for purposes of data collection were undertaken.

The data were analyzed by the chi-square analysis to determine if there was a relationship between the response of the child and the power of the influence-technique used by the teacher. A descriptive, interpretive analysis of the direction of this relationship was also made.

Conclusion

The results of the chi-square analysis indicated clearly that there was a relationship between the power of the influence technique used by the teacher and the response of the child to this technique. When high power techniques were used there was a strong tendency for the child to comply immediately. However, when the response was not immediate compliance, it tended to be non-compliance nearly as often as it was qualified compliance. When moderate power techniques were used there also was a tendency to comply immediately.

When immediate compliance was absent there was a slightly greater tendency to comply in a qualified manner than not comply at all. With low power techniques, non-compliance was the most frequent response.

Although this study does not attempt to determine the psychological results of influence-techniques, studies have shown that high power influence-techniques tend to produce such results as accumulation to hostile tensions, needs to be power assertive and heightened autonomy needs. In contrast moderate and low power techniques not only eliminate these consequences, but also help the child develop his own internal controls and help him understand the consequences of his actions. From this point of view the moderate power techniques are probably to be preferred.

BIBLIOGRAPHY

1. Abbott, Jacob. Gentle measures in the management and training of the young. New York, Harper Brothers, 1872. 330 p.
2. Anderson, Harold H. Domination and social integration in the behavior of kindergarten children and teachers. Genetic Psychology Monographs 21:287-385. 1939.
3. Andrew, J. O. Family government. Richmond, John Early, 1853. 132 p.
4. Blatz, William E. and Helen Bott. The management of young children. New York, William Morrow, 1930. 354 p.
5. Dawe, Helen C. An analysis of two hundred quarrels of pre-school children. Journal of Child Development 5:139-157. 1934.
6. Faegre, Marion L. and John E. Anderson. Child care and training. Minneapolis, University of Minnesota Press, 1930. 275 p.
7. Heather, G. The adjustment of two-year-olds in novel situations. Journal of Child Development 25:147-158. 1954.
8. Hoffman, Martin L. Power assertions by the parent and its impact on the child. Journal of Child Development 31:129-143. 1960.
9. Hoffman, Martin L. Parent discipline and the child's consideration for others. Journal of Child Development 34:573-588. 1963.
10. Hoffman, Martin L. et al. A conceptual framework for parental influence techniques. Detroit, Michigan, Merrill-Palmer Institute, n. d. 33p. (Mimeographed)
11. Johnson, Margerite Wilker. The influence of verbal directions on behavior. Journal of Child Development 6:196-204. 1935.
12. Lewin, K., R. Lippitt and R. White. Patterns of aggressive behavior in experimentally created "social climates". Journal of Social Psychology 19:271-299. 1939.

13. Li, Jerome C. R. Introduction to statistical inference. Ann Arbor, Edwards Brothers, 1957. 568 p.
14. McClure, Sue Cook. The effect of varying verbal instructions on the motor responses of pre-school children. *Journal of Child Development* 7:276-290. 1936.
15. Moore, Sallie Beth. The use of commands, suggestions and requests by nursery school and kindergarten teachers. *Journal of Child Development* 9:185-201. 1938.
16. Redl, Fritz and David Wineman. Controls from within. Glencoe, Free Press, 1953. 332 p.
17. Scoggen, Phil. Environmental forces in the everyday life of children. In: Roger G. Barker's *The stream of behavior*. New York, Appleton, 1963. p. 42-69.
18. Sigel, Irving E. et al. Influence techniques used by parents to modify the behavior of children: A case presentation. *American Journal of Orthopsychiatry* 27:356-364. 1947.
19. Sigel, Irving E. et al. Toward a theory of influence techniques: Preliminary report. *Merril Palmer Quarterly* 1:3-16. 1954.
20. Siegel, Irving E. and Martin L. Hoffman. The predictive potential of projective test. *Journal of Projective Techniques* 20:261-264. 1952.
21. Simmons, Helen and Phil Schoggen. Mothers and fathers as sources of environment pressures on children. In: Rogers G. Barker's *The stream of behavior*. New York, Appleton, 1963. p. 70-77.
22. Thom, Douglas A. *Everyday problems of the everyday child*. New York, Appleton, 1928. 349 p.
23. Vaughn, James. *Positive versus negative instruction*. New York, National Bureau of Casualty and Surety Underwriters, 1928. 172 p.

APPENDICES

APPENDIX A

CATEGORIES USED IN THE OBSERVATIONAL SYSTEM

Influence-Technique Categories (Teacher)

High Power Techniques: High power techniques are those which without qualification put direct coercive pressure on the child to change his entire ongoing pattern of behavior immediately. This technique is exemplified by direct commands, threats, deprivations and physical force.

These unqualified power assertions rely for their effectiveness primarily on the high degree of external coercive pressure they put on the child to comply.

All mechanical influence techniques are high powered. Mechanical techniques are those in which the teacher takes over and directly alters the child's behavior. Examples here are where the teacher picks the child up bodily and removes him from the situation, or where she removes the child's hand from a particular object, or where she holds the child by restraining certain parts of his body in order to prevent certain activities or behavior from occurring. Mechanical techniques, however, need not be necessarily directed toward the person of the child. They may manifest themselves in environmental manipulation such as removing objects from the child's

reach or taking objects from the child.

In using these techniques, especially in reaction to the child's non-compliance, the teacher appears to impose her personal will rather than legitimize the demand, and to override the child's wishes and involvements of the moment. This is not to say that the teachers goal with respect to the child's behavior is necessarily arbitrary or based on whim. The teachers goals usually arise out of physical or social demands of the situation, even when unqualified power assertive techniques are used and, further, the required behavior is often in the child's long-range interest. What is meant here is that the technique itself involves no explicit attempt to gratify the child's needs.

Moderate Power Techniques. Moderate power techniques differ from high power techniques in that they are qualified. These may be the same techniques used in high power but with qualification. For example, the teacher might use an explanation which attempts to justify the required behavior in terms of the welfare of the child or someone else. Or the teacher might temper the power assertiveness of a technique by providing a substitute making the required behavior more attractive or expressing supportive understanding of the child's desire to continue what he is doing.

A moderate power technique may include one or more items of information which serve to explain or justify the teacher imposing her will on the child. This information is used as a "reason".

Although the power assertive component of the technique still puts coercive pressure on the child and conveys that he has no choice regarding compliance, the inclusion of a reason tends to lower the technique's power assertive quality by making it appear less arbitrary.

Power assertive techniques may also include one or more items which serve to ease the pressure and thereby reduce the frustration potential of the demand made on the child. These efforts to soften the blow, are called "cushions" and provide the child with some degree of gratification which may partly compensate for the need renunciation called for by the power assertive part of the technique.

One important type of cushion is that which considers the child's involvement and allows him some measure of closure. This may be done by allowing him to continue his behavior for a time before requiring its termination, or by providing him with a substitute which is to some degree its functional equivalent.

Another way the child's ongoing behavior may be taken into account is by using a technique which indicates that the restriction or deprivation is only temporary and that he can return to his activity afterward. Although the child is required immediately to sacrifice his interest, such techniques give him some closure if only at the cognitive level.

When the aim of the technique includes getting the child to engage in some particular behavior, like sharing a toy, a cushion may

be used to make this behavior less objectionable to the child. This may be done by reducing its scope such as removing or lessening some of its objectionable aspects, or by adding an attractive dimension to it. Other cushions provide some sort of gratification of the child's more general needs, for example, by expressing supportive understanding of his desire to continue what he is doing, or acceptance of his hostile response to being deprived.

Another cushion that tends to reduce slightly the degree of arbitrariness is when the technique places the behavior in question within the context of an already established rule rather than dealing with it only as a concrete act. Invoking such rules, even though they may have been originally instituted by the teachers tends somewhat to depersonalize the demand.

Like reasons, cushions do not alter the power assertive status of these techniques, since their power assertive component still puts pressure on the child and conveys that he does not have the choice of whether or not to comply. As with reasons, however, the inclusion of cushions should take the edge off power assertive techniques.

Low Power Techniques. Low power techniques are those which do not invoke authority but instead rely for their effectiveness primarily on the child's own internalized standards. Such techniques communicate to the child the behavior change desired and also indicate that he has the choice of complying or not. Low powered

techniques may also be those techniques which indicate that the child must comply but also gives the child a choice of two or more ways of complying. For example, a teacher may tell the child that he must either put the stick down or stop running.

These techniques put little, if any, coercive pressure on the child, and correspondingly, have a high choice-giving quality. This type of technique conveys in greater or less degree and more or less explicitly that it is the child's responsibility to decide what to do. Nothing in the technique explicitly indicates that the teacher will in any way punish the child for non-compliance.

The major types of inductive techniques are persuasion and suggestion. Persuasion is the technique which gives the child information relevant to why he should change his behavior, while applying little or no coercive pressure for him to comply. Most of the categories of persuasion are very much like those of reasons, and some resemble certain "cushions". Because choice regarding compliance is given, however, persuasion tends to have the quality of appealing to some aspect of the child's psyche so as to induce the appropriate need or desire which would result in his voluntarily doing what the teacher wishes. This is contrasted to reason, which has more often the quality of explaining or justifying a demand made on the child, and cushions, which have the function of lessening the impact of the demand.

Suggestions are techniques which merely communicate the

direction in which the child is to change his behavior with out applying coerceive pressure. Such techniques proposes or invites the child to change his behavior indicating explicitly or implicitly that he has the choice of whether or not to do so. Unlike persuasion there is no informational content to give the child a basis upon which to make his choice. Thus suggestions are manifestly non-coerceive and represent maximum choice regarding compliance.

The following are examples of the three influence technique categories:

HIGH POWER

Divergence

Jeff is playing with clay in the wrong area.

Bob is standing while he is eating.

Teacher wants Joe to let another child have a turn sawing.

Walter is holding wood-working tools before the activity is ready to begin.

John picks up tools to work before his turn.

Sue begins to get colors out.

Mary is trying to take a puzzle away from another girl.

Influence-Technique

"Jeff, I want you to play with the clay at the table please."

"You sit down and eat your cracker. Will you please?"

"You need to stop now."

"Did I tell you you could hold these? Lets put them back down"

"John, you get something else to do."

"We're not going to color now, Sue." Teacher takes colors away.

"Mary!!!"

MODERATE POWER

Divergence

Barb picks up tools to begin work at the wood-working bench.

Debbie is standing on the mat Jerry is trying to put away.

Teacher is trying to get Joan to help clean up.

Jody is looking at another child's book.

Teacher wants Gailen to soon begin picking up the blocks.

Terry begins to take the clay out of the cupboard.

Lee is running across the room.

Influence -Technique

"Now, Barb, you need to wait until Jeff is through, because two people can't work on the same bench at the same time."

"Debbie get off the mat. Jerry is trying to pull it in."

"Joan are the colors away in the lockers? Lets put everything away so we can go outside."

"Jody, I know you want to look at that book but it belongs to Cindy."

"Gailen, you will have to pick up the blocks soon. It's about time for rest."

"We're not going to take out the clay right now. You can play with it after rest."

"I just told you a few minutes ago not to run. Did you hear me?"

LOW POWER

Divergence

Teacher wishes Virginia to go outside.

Chuck is having difficulty sliding a box out the door.

Heidi has a part of a puzzle in her mouth.

John leaves the train he has been playing with and begins to put a puzzle together.

Leslie starts to wash paint brushes but leaves before she is finished.

Child asks if he can have a turn sawing next.

Rest time. Joan is playing with her hair ribbon.

Influence-Technique

"Virginia, would you like to go outside now?"

"Chuck, if you would turn the box it would slide better."

"Heidi, that doesn't belong in your mouth."

"John, do you think it would be a good idea if you put your train away before you work on the puzzle."

"Leslie, look at those paint brushes. My goodness, you usually do a better job than that."

"Yes, but you need to find something else to do right now or sit over there so you don't get hurt."

"You had better put it back in your hair or put it in your locker!"

Response Categories (Child)

Compliance. When a child is confronted with an influence-technique which indicates that his behavior should be changed he may react in four possible ways. These are:

Immediate Compliance. The child yields immediately to the teachers attempt to modify his behavior through the use of an influence-technique. The child may respond in a positive manner with cues given by the child such as facial expression and language indicating that he wishes to comply or he may respond in an accepting or neutral manner with an absence of cues showing negative or hostile feelings.

Resistive Compliance. The child may comply immediately or after a slight delay, but cues given by the child such as facial expression, language, body movement and tension indicate that the child does not wish to submit. The child may verbally refuse to comply but at the same time yield to the teacher's wishes or he may explain or indicate why he does not wish to comply while he is complying. The child may also delay complying but indicate that he will soon comply.

Compromise Compliance. The child complies to the teacher's wishes but only partially. He appears to compromise by beginning a task and immediately stopping or only carrying out a part of her wish.

This does not apply to those cases where the child may work at the task for some time before he loses interest or for other reasons does not finish.

Non-Compliance. The child fails to respond to the teacher's attempt to modify his behavior. The child may actively refuse to comply or he may simply ignore the teacher's wish. Also included are those times when the child verbally complies but does not physically carry out what the teacher desires. Here also the child may make an excuse for his previous actions or for what he plans to do but does not comply.

The following are examples of the four response categories.

IMMEDIATE COMPLIANCE

Influence Technique

Response

"Bob, you need to wash your hands. It's time for lunch."

"Oh boy, I'm hungry."

"I'm not going to read that story today. We read it yesterday."

Lee acceptingly picks up another book.

"Tod, let's not wash all the dishes at once. Leave some for others to wash."

Tod, leaves the dishwashing activity.

RESISTIVE COMPLIANCE

Influence-TechniqueResponse

"John, I told you this morning that you would not be able to use the tricycles this afternoon. "

John begins to cry but gets off the tricycle.

"Dick, pick up the book you dropped. "

"No" Dick picks up the book.

"Jane, you let Joyce have a turn on the swing now. "

"After I stop. "

COMPROMISE COMPLIANCE

"Leslie, put the blocks away now. "

Leslie puts two blocks in the box and stops.

"Put both feet on the cot, John. "

John puts one foot on his cot.

"Larry, go the wash room and wash your hands for lunch. "

Larry goes into the wash room; turns and comes back out without washing his hands.

NON-COMPLIANCE

"Debbie, you let Mary wash the clothes now. "

Debbie continues to wash the clothes.

"Sam, lie down on your cot now. "

"No. "

"I asked you to sit at the table. "

"I fell down. "

APPENDIX B

DEFINITIONS

Influence-techniques. Influence-techniques are overt acts by the teacher which are used to modify a specific ongoing or expected behavior of the child. Influence-techniques may take the form of verbal, gestural, or physical communication. As such they are concrete representations of the teacher's wish regarding the child's behavior. The essential condition for the appearance of an influence-technique is the occurrence of a divergence between the behavior of the child and the wish of the teacher regarding the behavior. Various kinds of divergences are possible. Whatever the nature of the divergence, an influence-technique is the means by which the teacher attempts to resolve it.

Divergence. A divergence occurs when there is a difference between the goal of the teacher and the goal of the child. It can exist only in a socially interactive setting, and it is the necessary condition for the arousal of an influence-technique. According to Siegel et. al. (19, p. 3-16), a divergence may arise as a function of one of at least three types of social conditions. In regard to the teacher and the child these would be:

- (1) The ongoing or expected behavior is unacceptable to the

teacher. Unacceptability may be based on (a) the intrinsic nature of the act, that is the child is doing something of which the teacher does not approve; of (b) the time at which the act is performed, the intrinsic acceptability of the child's act being irrelevant at this time. An illustration of the first condition is when one child is being physically aggressive with another child and the teacher does not approve; of the second condition, when the child asks the teacher to read a story at a time when all children must rest quietly.

(2) The teacher wishes the child to be doing something irrespective of what the child is then doing or might do. In this case the child's ongoing or expected behavior is irrelevant and unconnected to the teacher's preference for what he should be doing. For example, the child is playing outside and the teacher may wish him to come inside for lunch. The divergence is between the child's play and the teacher's wish that the child come inside.

(3) The child is perceived as having some difficulty and the teacher wishes the child to succeed or get over a state of discomfort assumed by the teacher to coexist with the difficulty the child is having.

Influence Interaction Sequence. This is a sequence of behavior events involving interaction between the teacher and the child which has as its origin a divergence, followed by the use of one or more influence-techniques. When an initial divergence arises, the teacher

has a choice of acting to solve the divergence or ignoring it. When she chooses to act the influence interaction sequence begins. The child's response to the influence-technique may be consistent with the teacher's wish. If so, the sequence ends with that response. When this does not occur however, the teacher has three alternatives: (1) to modify the influence-technique; (2) to modify the original wish and shift the nature of the divergence; (3) to leave the situation with the divergence unresolved. Any of these responses may apply to any type of divergence. In any instance, interaction between the teacher and the child, as a function of various types of divergence, may continue until the participants make some adjustment. The influence interaction sequences terminates when behavior relevant to the divergence is no longer present.

Power. Power is the potential the teacher has for compelling the child to act in a way contrary to his own desires. Power may be manifested overtly in influence-techniques. A teacher may choose a high power technique such as one which applies external pressure or she may choose a low power technique such as one which attempts to gain voluntary behavior change by inducing internal forces. This difference in choice of power techniques applies to initial techniques used to change the child's behavior and also to those used in reaction to non-compliance. Influence-techniques are grouped into three categories of power in this study.

Time Orientation. Time orientation refers to the relationship between the time the influence-technique is used and the time indicated, explicitly or implicitly, for the child to make the behavior change in question. Some techniques call for immediate compliance by the child, while others may specify a certain amount of time within which compliance is to occur. In the latter case, the time may be arbitrary, that is in terms of a given number of minutes, or depending on the occurrence of some event. It can theoretically vary from a few moments to days or even weeks. The writer, however, is concerned with influence-techniques used to change the child's on-the-spot behavior. This, the range of time orientation in which this study is concerned is limited to the present and confined to techniques which call for compliance shortly after the technique is used.