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U N I V E R S I T Y O F W I N D S O R  
The School of Social Work

THE EFFECT OF DAY CARE CENTRE ATTENDANCE  
UPON TEACHERS' RATINGS OF SOME ASPECTS  
OF CHILDREN'S ADJUSTMENT IN KINDERGARTEN

BY

Wayne A. Shaefer

A research project presented to the School of Social Work  
of the University of Windsor in partial fulfillment of  
the requirements for the degree of Master of Social Work.

October, 1975

Windsor, ONTARIO, CANADA

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Research Committee

Mr. R.G. Chandler, Chairman  
Dr. Lola Beth Buckley, Member  
Dr. Ray Daly, Member

## ABSTRACT

The focus of this research was to examine whether a child's attendance at a day care centre would have a positive, negative, or neutral influence upon his adjustment to kindergarten as that adjustment was perceived by his kindergarten teacher. Adjustment here is meant to include both personal and social aspects.

The hypothesis advanced was that attendance at a day care centre prior to entry into kindergarten would have a negative influence on a child's adjustment to kindergarten, as that adjustment was perceived by his teacher.

A "paired replicates" model was used in the design of the study. That is, the total number of children who attended the Lauzon Road Day Care Centre in Windsor in 1971-1972 were followed to their respective kindergartens and matched with a comparison group of their peers according to sex, I.Q., socio-economic status (SES), and ordinal position in the family. SES information was obtained by direct contact with the parents of the day care centre children and from the school records of the non-day care centre children. Hollingshead's Two Factor Index of Social Position was used to determine SES, and I.Q. was determined by administration of the Peabody Picture Vocabulary Test to each pupil in each

kindergarten class.

The teachers were asked to complete four independent rating scales for each child selected, with each scale measuring her judgment of each child's adjustment to group activities, other children, the teacher, and the child himself. A fifth rating of relative brightness was obtained by a forced choice method, that is, names of the critical pairs matched as above were listed together with the names of other pairs drawn from the class at random. It was thus possible to keep the teachers unaware of the purpose of the study until after it was completed to avoid the possibility of bias in their responses.

Analysis of the data revealed no statistically significant difference in the perceived adjustment of the two groups, and it was concluded that generalizations to a larger population were not possible due to the limited population examined in this study.

Areas for future research were suggested by many of the items of related literature reviewed. The role of social work intervention in early childhood education was proposed as feasible and desirable.



## ACKNOWLEDGEMENTS

This research study would not have been possible without the contributions of numerous individuals, and the writer would like to express his thanks to all of them.

The late Dr. W.Y. Wassef gave freely of himself to encourage and inspire the writer to undertake this project.

The chairman of the committee, Mr. R.G. Chandler, gave able assistance at each step of the process, and thanks is gratefully extended to him and the other members of the committee, Dr. Lola Buckley and Dr. Raymond Daly.

Appreciation is expressed to Mr. Z. Veres, Administrator of Student Services, and Dr. Ray Caverzan of the Windsor Board of Education; and Mr. D. Diaubaldo, Area Superintendent, Windsor Separate School Board. The Principals and teachers of the participating schools are also thanked.

Mrs. Leigh O'Flynn, Supervisor of Day Nurseries, Social Services Department, City of Windsor, provided invaluable help in contacting the parents of the children from the Lauzon Road Day Care Centre.

Thanks are due, too, to Mrs. Asta Hansen, librarian at the Children's Psychiatric Research Institute, London, for her cheerful labours in searching out innumerable articles from journals and other sources.

Thanks go to Ms. Joanne Lemon, who typed the final draft, and to Mr. Fred Gradwell for the impeccable copies from his skilled hands.

And thanks and appreciation are due to my wife, Alison, whose patience, forbearance, and encouragement were remarkably unflinching over a long period of time. She, too, provided valuable aid in locating journal and other articles during the research of the literature.

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## CHAPTER I

### INTRODUCTION

The interest that led to the undertaking of the present study began when the writer's son attended a day care centre for a few months before enrolling in kindergarten. This interest grew as he continued to attend the centre each day before going to kindergarten, returned there for lunch, and then spent the hour or so there between the time kindergarten was dismissed until he was picked up by one of his parents. This same pattern of spending a portion of the day at the day care centre when he was not in kindergarten continued until he was part way through the first grade. At that time, because of apparent difficulties he was having in adjusting to the school system, he was removed from the day care centre and cared for by a neighbour for the out-of-school hours.

Were the adjustment difficulties that had been observed peculiar to this one child, or were they likely to be found in other children who had attended a day care centre and kindergarten in a pattern similar to the one described above?

As the writer pursued his studies in social work to the graduate level, the question of a possible role for

social work intervention in the area of preschool education gradually emerged to prompt a concerted search by this writer of the literature of this field. Surprisingly, few of the studies of early childhood education found by this writer were oriented toward social work; the vast majority being in the fields of education and psychology. While most of these studies had as their goal the evaluation of programs designed to measure intellectual and cognitive functioning in the preschool child, the elements of emotional and social concerns of interest to social work were usually implicit.

Social workers are becoming increasingly involved in the educational system, and, while day care is not yet part of that system in Canada, there are indications that it may be at some future time. In the United States present pre-kindergarten programs seem to be most concerned with socially and economically deprived children, thereby seeming to lead to the logical inclusion of social work intervention in these programs.

Developmental psychologists have long held the theory that the first six years of a child's life are vitally important in relation to his later learning ability and achievement.<sup>1</sup> And yet, these first six years can be among the most difficult that the individual will experience in.

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<sup>1</sup>Ellis D. Evans, Contemporary Influences in Early Childhood Education (New York: Holt, Rinehart and Winston, Inc., 1971), p. 3.

learning to cope with the adjustments to life's vicissitudes. Dobson contends that the children of our society are, from the time they are born, subjected to an unjust value system. He says that

...human worth in our society is carefully reserved for those who meet certain rigid specifications. The beautiful people are born with it; those who are highly intelligent are likely to find approval; superstar athletes are usually respected. But no one is considered valuable just because he is! Social acceptability is awarded rather carefully, making certain to exclude those who are unqualified... The matter of personal worth is not only the concern of those who lack it. In a real sense, the health of an entire society depends on the ease with which its individual members can gain personal acceptance. Thus, whenever the keys to self-esteem are seemingly out of reach for a large percentage of the people, as in twentieth-century America, then widespread "mental illness", neuroticism, hatred, alcoholism, drug abuse, violence, and social disorder will certainly occur. Personal worth is not something human beings are free to take or leave. We must all have it and when it is unattainable, everybody suffers.<sup>1</sup>

Statements such as this encouraged the writer to pursue this study to a formal conclusion. If the preschool years are among the most vulnerable in the life of the individual, would they not also present the optimum opportunity to intervene and hopefully prevent the development of many problems? Support for this point of view was found in studies conducted in the field of pediatrics, where it was proposed that

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<sup>1</sup>James Dobson, Hide or Seek (Old Tappan, New Jersey: Fleming H. Revell Company, 1974), pp. 7, 12-13.

...the use of family interviews as the modality for consultation opens exciting possibilities for rapid and effective intervention in childrens' symptomatology before this becomes fixed in the pattern of family life...Brief intervention through family interviewing can be applied to any setting which allows for early discovery of children's problems, not only in pediatrics practice but in nursery school and well-baby clinics as well. This method deserves experimentation and testing as a mental health tool in such large-scale programs as project Head Start.<sup>1</sup>

This study examined the influence that attendance at a day care centre before entry into kindergarten may have on certain aspects of a child's social and personal adjustment in kindergarten. Also examined was the potential for social work intervention at this early stage of child development.

There are two aspects of the effects of group experience on the young child that are of interest; one is the general global advantages or disadvantages such group programs present for preschool children, and the other is the specific effects that might be expected in terms of a particular child. Do the many programs, as they are now constituted, enhance or hinder a preschool child's later adjustment to the educational system? It is hoped that this study will help to shed some light on this matter, especially as it applies to social work.

The study is divided into five chapters: Chapter II

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<sup>1</sup>Bernice Augenbraun, Helen L. Reid, and David B. Friedman, "Brief Intervention as a Preventive Force in Disorders of Early Childhood," American Journal of Orthopsychiatry, 37, 4 (1967), pp. 701-702.



is a review of the literature covering at least the five years immediately preceding the gathering of the data for the study. Chapter III describes the design of the research, and Chapter IV outlines the analysis of the data. Finally, Chapter V gives the summary and conclusions of the study.

### Summary

This chapter dealt with the various catalysts that led this writer to conduct a research study into the adjustment in kindergarten of children who had previously attended a day care centre compared with those who had not. The question of social work intervention in preschool education programs was raised.

## CHAPTER II

### THE NATURE OF THE PROBLEM

The findings of the many studies reviewed from the literature were far from unanimous, as might be expected. In one such study, however, Swift outlines the relevance of research into preschool programs for the field of social work:

For the social worker engaged in civic planning to meet the needs of the community's children, it is important to understand the values and dangers inherent in the use of group care for large numbers of young children. Before day care centers are provided on a large scale as a solution to the problem of the working mother, as a method for lightening relief rolls, or as a means of enabling more mothers to work, the effects of the group experience on the child's development need to be considered. (Emphasis added). For the caseworker engaged in planning with parents the best solution to a family problem, a thorough understanding of what is involved in the use of a group care program for a given child is necessary---or the plan made may be worse than the problem it proposes to solve.<sup>1</sup>

Van Alstyne and Hattwick<sup>2</sup> conducted a follow-up

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<sup>1</sup>Joan W. Swift, "Effects of Early Group Experience: The Nursery School and Day Nursery," in Review of Child Development Research, ed. by Martin L. Hoffman and Lois W. Hoffman (New York: Russell Sage Foundation, 1964), p. 251.

<sup>2</sup>Dorothy Van Alstyne and LaBerta A. Hattwick, "A Follow-Up Study of the Behavior of Nursery School Children," Child Development, 10, 1 (March, 1939), pp. 43-72.

study of the behaviour of nursery school children to try to determine if a child's behaviour in the preschool years could be used as a basis for prediction of his later behaviour. They sought to identify, if possible, those behaviour problems and emotional and social traits significantly characteristic in the early life of the child as judged by his later adjustment in school. Although they qualify their findings by the statement that the differences were not statistically significant, their results showed that children rated less well adjusted in the elementary school setting (kindergarten through grade five) were, when attending the nursery school,

habitually more difficult to manage, had more difficulty with other children, sucked their thumbs and fought more often than did the children in the better adjusted groups. In terms of general tendencies rather than habitual behavior, the children in the less well adjusted group were likewise difficult to manage, negativistic and showed more tendencies to suck their thumbs. In addition they had more temper outbursts, and more jealousy than did the other group.<sup>1</sup>

In addition, they also found that

the better adjusted elementary group were found to have been in nursery school more flexible, more adequately responsive to failure, more deliberate and cautious, more friendly and sympathetic, more suggestible and even tempered and were described as having more acceptable behaviour and as being self-conscious less frequently. Those less well adjusted were, in nursery school, bolder, less flexible, less adequately responsive to failure,

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<sup>1</sup>Van Alstyne and Hattwick, p. 52.

more impulsive and unreflective, more negativistic and moody, and were described as showing less acceptable behaviour and more extreme variations in affection.<sup>1</sup>

The general conclusions of this study were that children who had attended a nursery school showed a tendency for better emotional adjustment and leadership in elementary school. They also found that the better adjusted group was already more flexible and adaptable in the nursery school than was the less well adjusted group. In other words, inflexibility at an early age may be one of the major predictors of later problems. Conversely, adaptability at this stage may indicate the potential for good adjustment in the future.

Van Alstyne and Hattwick urged that as these danger signals of future problems are observed in the nursery school setting, every effort should be made to find the causes of these difficulties and to remove them or ameliorate them. In concluding their follow-up study of nursery school children's behaviour, they note that it

agrees with previous findings of other researchers that the nursery school makes for social adaptability, independence, self-assertiveness, self-reliance, and interest in environment. It adds as a significant finding that the nursery school makes for better emotional adjustment and leadership.<sup>2</sup>

This conclusion is supported by another study that

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<sup>1</sup>Van Alstyne and Hattwick, pp. 54, 56.

<sup>2</sup>Ibid., p. 69.

begins with an assertion based on a review of other studies,

...nursery schools tend to accomplish the rare achievement of promoting the child's sociability and at the same time fostering his individuality and independence in a social group.<sup>1</sup>

This Jersild and Fite study attempted to determine two aspects of the effects of attendance at nursery school: quantitative directions in the study of a small group of eighteen children, and individual children's adjustment evaluated beyond the initial averages and correlations. The site of the study was a playground, and the average age of the children was forty-one months.

A tally was made of what Jersild and Fite called social contacts, defined as any thirty second interval during which it appeared that one child was interacting with another child. Simple watching of another child's activity or engaging in an activity similar to that in which a nearby peer was involved did not count as social contacts, but talking to a peer, touching him, joining in an activity with him or sharing toys, et cetera, with him, and engaging in cooperative, organized play did qualify as social contacts.

Measures of social contacts were made in the fall of the year and again in the spring, and it was found that

in the fall, the intervals of social contacts exhibited by children who had had previous nursery

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<sup>1</sup>Arthur T. Jersild and Mary D. Fite, "Childrens Social Adjustments in Nursery School," Journal of Experimental Education, 6, 2 (December, 1937), p. 161.

school experience and who had old acquaintances in the present group far exceeded those exhibited by other children.<sup>1</sup>

The conclusion drawn from these findings was that previous nursery school experience seemed to have the effect of enhancing children's ability to make social contacts and to interact freely with others. The researchers conceded that this could also be attributed to previous contact with the same children outside of the study site.

The most remarkable measure of the study, taken in the spring of the year, showed that the two groups (nursery and non-nursery) were now, for all practical purposes, on a par. That meant that the non-nursery school group had made a significantly greater increase in the number of social contacts when compared with the former nursery school children. The progress of the non-nursery school children as a group, then, was equal to that of their peers who had attended nursery school for the one or two years preceding the test year. Individual analysis revealed that the apparent superiority of the nursery school attenders when measured in the fall of the year was, as suggested earlier, due more to a carry-over of past friendships and acquaintances than to a "real" difference in sociability.

However, the argument that nursery school attendance is a factor in increasing sociability was strengthened by

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<sup>1</sup>Jersild and Fite, p. 162.

the behaviour of two children who were new to the present school situation. The previous year they had attended a different nursery school than the one attended by the rest of the nursery school group. These two children, while scoring quite low in the fall of the year, advanced more quickly during the year than did children who had not attended nursery school before.

Throughout Jersild and Fite's study, the highly individual nature of children's adjustments and the effects of attendance at nursery school were evident, but in general the results tended to confirm other studies that found that a child's social development is improved by the experience of nursery school. This study concluded, however, by contending that the

nursery school offers many splendid opportunities to encourage skills and aptitudes that will help a child not only in coping with his physical environment but also make him more effective as a person, less timorous and more independent... (And) training in a simple skill can have rather profound effects on a child's self-assurance and his relations with his fellows.<sup>1</sup>

Similar findings were published by Walsh in a study that examined the effects of nursery school training on the development of certain personality traits. She found that

nursery school children became less inhibited, more spontaneous, and more socialized with training.

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<sup>1</sup>Jersild and Fite, p. 166.

They developed more initiative, independence, self-assertion, and self-reliance than the control group. They showed a greater increase of curiosity and interest in their environment... (and) habits of health and order were much more numerous than in the control group.<sup>1</sup>

In the conclusion of her brief report, Walsh speculates that the differences observed were probably due to the constant need the nursery school children had to adjust to peer group pressure and socialization. The aspect of peer group pressure and socialization is certainly present in such a group setting, but whether or not the need to adjust to it is constant is perhaps open to question.

A study on the influence of nursery school education upon behaviour maturity was conducted by Joel while the children were still in nursery school. For the purposes of his study, Joel gathered the data through teacher ratings, and defined behaviour maturity as

grown-upness, the opposite of childishness, or more specifically as the relative degree of independence, self-control, and social attitude reached.<sup>2</sup>

The children had been in attendance for as little as one month to as much as thirty-six months, with a median attendance of nine months. Results of this study showed that

there is a significant difference in Behavior Maturity Index, ... the children who spent more time in nursery school having the higher average Index. Of the three

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<sup>1</sup>Mary Elizabeth Walsh, "Brief Reports: The Relation of Nursery School Training to the Development of Certain Personality Traits," Child Development, 2 (1931), p. 72.

<sup>2</sup>Walter Joel, "The Influence of Nursery School Education upon Behavior Maturity," Journal of Experimental Education, 8, (December, 1939), p. 164.



sections of the scale, the items indicating social maturity contribute most to this difference. There are 99.75 chances in 100 that the difference in emotional maturity is likewise significant.<sup>1</sup>

Allowing for the questions raised by the use of teacher ratings, which will be discussed later in this study, the conclusion reached was that

longer nursery school attendance is associated with greater behavior maturity as measured by the "Behavior Maturity Rating Scale for Nursery School Children"...such a relation would indicate that the nursery school successfully influences the child to grow up emotionally and socially.<sup>2</sup>

The specific personality trait of security-insecurity was the focus of yet another study. Andrus and Horowitz employed a rating scale that would provide them with an index of insecurity and, conversely, with an indication of security. In six out of the seven schools in which their study was done, the correlation as measured by a rating scale between insecurity and length of time spent in the nursery school was positive, but not statistically significant. This finding is qualified by the statement that the primary concern of the rating scale used was with the socialization and adjustment of the individual child, and not with specific training.

Andrus and Horowitz conclude that because of the doubts raised concerning the validity of the underlying theory of security-insecurity as the basic premise of the

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<sup>1</sup>Walter Joel, p. 165.

<sup>2</sup>Ibid.

rating scale used,

the question of the nature and extent of the effect of nursery school training on the insecurity feelings of children can not be answered, even in part, by the present study, ...further intensive study of insecurity at the early childhood level is needed.<sup>1</sup>

Cushing<sup>2</sup> studied the adjustment of nursery school children to the kindergarten setting as rated by the kindergarten teachers. She noted that both parents and kindergarten teachers had expressed concerns about children who had been to nursery school being "spoiled" for kindergarten, and that because of the similarity of materials which the children had used at both levels they would be somewhat off-hand about the kindergarten setting. Also mentioned as a concern was the fact of the generally greater degree of freedom found in the nursery school when compared to the more structured and directed context of the kindergarten, and that this contrast in procedures might reduce the degree of cooperative behaviour that otherwise might be expected from the "average" kindergarten child. Also, the parents of children who had attended nursery school might be somewhat disenchanted with the apparent overlap of the two programs, and that this might reflect itself in possible undue

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<sup>1</sup>Ruth Andrus and Eugene L. Horowitz, "The Effect of Nursery School Training: Insecurity Feelings," Child Development, 9, 2 (June, 1938), p. 174.

<sup>2</sup>Hazel M. Cushing, "A Tentative Report of the Influence of Nursery School Training Upon Kindergarten Adjustment as Reported by Kindergarten Teachers," Child Development, 5 (1934), pp. 304-314.

demands for extra teacher involvement with their child.

No evidence of inferior adjustment to kindergarten on the part of the nursery-school-trained child was revealed by this study, however. They were rated by their teachers to be only slightly superior in their overall adjustment to kindergarten, and significantly better adjusted in their general attitude. Further, mothers of the nursery school children showed no significant difference in their demands on the kindergarten teacher than did mothers of children who had not been to nursery school.

Cushing suggested that when kindergarten teachers speak negatively about the adjustment of nursery school children to kindergarten, it is the result of atypical experiences with specific children. Listed as possible contributing factors to this attitude were:

1. The lower chronological age of the nursery school child combined frequently with high intelligence --such a child tends to present a problem in a conventional school group at any level.
2. The freedom and lack of restriction in the nursery school which may run counter in some instances to the greater conformity demanded in the kindergarten.
3. The use of initiative stressed in nursery schools as against passive participation in the more directed types of activity of the kindergarten.
4. The fact that it is highly probable that a selective behavior factor influences enrollment in the nursery schools, that is, a higher proportion of 'difficult' children probably find their way to nursery schools as they are set up at present.
5. A certain antagonism and distrust of the nursery school on the part of the kindergarten teacher, so that she may unconsciously be more highly critical of the nursery-trained child.

6. The fact that the term 'nursery school' is used at present to convey a variety of situations and a varied length of training. There is a current tendency to loosely characterize any child who has ever attended any sort of preschool group for any length of time as a 'nursery school' child.<sup>1</sup>

Cushing cautions that more research is needed before any substantial conclusions can be reached regarding the effect that nursery school training has upon a child's later adjustment and progress.

A three-phase study comparing social adjustments of elementary school pupils with and without preschool training was conducted by Bonney and Nicholson.<sup>2</sup> They questioned whether nursery school and kindergarten experiences would make an identifiable difference in classroom social adjustments later in school when the nursery school children were compared to those not having attended such preschool facilities.

The first phase of the Bonney and Nicholson study was done in six classes: two kindergarten, two grades one, one grade two, and one grade three. The children in these grades were paired on the basis of nursery school attenders and non-attenders, and then the children were questioned as to preferred playmates. The teachers rated them on five main characteristics: "Cooperation, Social Consciousness,

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<sup>1</sup>Cushing, p. 311.

<sup>2</sup>Merl E. Bonney and Ertie Lou Nicholson, "Comparative Social Adjustments of Elementary School Pupils with and without Preschool Training," Child Development, 29 (1958), pp. 125-133.

Emotional Adjustment, Leadership, and Responsibility."<sup>1</sup> The teachers were unaware of the rating's goal.

The results of the sociometric tests completed by the nursery and non-nursery school children showed the scores to be significantly different, but only one of the five ratings done by the teachers proved to be statistically significant, and that was the rating for Social Consciousness.

The second phase of this research involved children in grades one through six. Just slightly less than one-half of the 402 children had not gone to nursery school, kindergarten, or any other type of preschool. The remaining one-half was as follows: about twenty-five per cent had attended nursery schools, fifty per cent had gone to kindergarten, and the remaining twenty-five per cent had attended both kindergarten and nursery school. "Classroom social adjustment was measured by sociometric testing and by teacher nomination."<sup>2</sup> Analysis of these procedures showed no significant results in either case, thus leading to the conclusion that there was

no evidence that those pupils who had attended some type of preschool had, as a group, any advantage in personal-social behavior over those who had had no preschool training, either from the standpoint of

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<sup>1</sup>Bonney and Nicholson, p. 126.

<sup>2</sup>Ibid., p. 127.

acceptability by training, either from the standpoint of acceptability by classroom peers or on the basis of teacher evaluation.<sup>1</sup>

In the final part of this study, four sixth grade classes were examined, again with the pupils being tested by a sociometric device and the teachers rating the pupils according to "over-all good adjustment to the classroom social situation."<sup>2</sup> The social adjustments of preschool and non-preschool children thus tested showed no statistically significant differences for the sixth grades evaluated.

These researchers recommend that the quality-level that is representative of the preschool training received by these children should be studied further, and also that an examination should be made into the carry-over into adult years of the so-called benefits of nursery school training. To their knowledge, few, if any such studies had been done at the time of their writing. They feel that such studies are imperative if the "benefits" derived in nursery school are to carry over into later life in any significant degree. A more critical attitude towards program content on the part of kindergarten teachers is strongly recommended by this study.

An attempt to evaluate the effects of nursery school

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<sup>1</sup>Bonney and Nicholson, p. 128.

<sup>2</sup>Ibid.

training was the goal of a study by Allen and Masling.<sup>1</sup> They suggest that studies previous to theirs have been lacking in two areas, namely adequate control groups, and failing to distinguish between the effects of maturation and the effects of nursery school. They contend, also, that in those studies done primarily through teachers' ratings that these ratings "frequently do not correlate with anything."<sup>2</sup> To try to correct for these "mistakes" in other studies, Allen and Masling elected to use not only an adequate control group, but also a measure more suitable than teachers' ratings. A "near-sociometric device", which they define as asking for a general rather than a specific response, was used to see if the changes presumed to have occurred in the nursery school child were perceptible to his peers.

After determining in the preliminary phase of their research that "no child was sent to nursery school or was prevented from going to nursery school for reasons concerning any gross behavior deviations,"<sup>3</sup> Allen and Masling's analysis of their data showed that

significant differences between groups occurred only in the second grade on the questions regarding

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<sup>1</sup>Gregory B. Allen and Joseph M. Masling, "An Evaluation of the Effects of Nursery School Training on Children in Kindergarten, First, and Second Grades," Journal of Educational Research, 51 (December, 1957), pp. 285-296.

<sup>2</sup>Ibid., p. 285.

<sup>3</sup>Ibid., p. 288.

popularity, spontaneity and intelligence. When all the grades are pooled, significant differences were reached only on the popularity and spontaneity questions.<sup>1</sup>

As a possible explanation for the lack of statistically significant results from the kindergarten and grade one groups, the researchers advanced the idea that the younger children were influenced in their replies to the questions by simple forgetting of the question, caprice, or whim. If this supposition held true, then it would reduce the "true" differences between the three groups. Because of his greater degree of maturity, the second grade child is not as distractible nor is he as subject to the influences mentioned above. The fact that the second-grade peers of nursery school children saw nursery school attenders as more spontaneous and more intelligent than children who had not been to nursery school suggested to these researchers that nursery school attendance has a positive effect on children in later school settings.

Douglas and Ross<sup>2</sup> reported on the later educational progress and emotional adjustment of children who had attended nursery schools or classes. They noted that children with more difficult home backgrounds are given priority to enter nursery schools because of the scarcity of such

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<sup>1</sup>Allen and Masling, p. 288.

<sup>2</sup>J.W.B. Douglas and J.M. Ross, "The Later Educational Progress and Emotional Adjustment of Children Who Went to Nursery Schools or Classes," Education Research, 7 (1964), pp. 73-80.



facilities, and speculate that the emotional and educational vulnerability of the nursery school group will likely be greater than a random group of the same population.

Douglas and Ross administered four standardised tests of intelligence and educational performance when the pupils were at the separate ages of eight, eleven, and fifteen years, with the goal of measuring ability as well as attainment. The subsequent analysis of these test results showed higher, but not statistically significant scores for the nursery school children at the eight-year level. The results of the analysis of the tests given at the eleven and fifteen year ages showed an even smaller difference than those of the eight year group. The trend suggested, however, that a significant difference might have been seen if the same testing had been done at an earlier age.

Although their final summary pointed out the apparent association of attendance at nursery school with poor adjustment assessments in later school life, Douglas and Ross add that such a conclusion could be erroneous because

at least some of the children are sent to nursery schools because they have problems of behaviour which, it is thought, would be helped by the atmosphere and social contacts these schools are expected to provide. If this was the reason for sending any considerable proportion of these children to nursery schools, it is clear that some have remained maladjusted, and it may well be that they...would have been more disturbed if they had not gone.<sup>1</sup>

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<sup>1</sup>Douglas and Ross, p. 79.

The persistence of early adjustment problems into later life was demonstrated by a follow-up study of 130 nursery school children by Westman, Rice, and Bermann.<sup>1</sup> Their goal was to see if children who later show indications of maladjustment can be picked out while they are in nursery school by making simple clinical judgments concerning their behaviour.

Not only did these researchers find from their study that adjustment problems persisted into later life both in degree and in kind, but they concluded that a sensitive nursery school teacher was thus in "a key mental health screening position"<sup>2</sup> because of the sufficiently accurate observations that the teacher is able to make at the individual, interpersonal, and family levels. It follows, they say, that since the evidence points toward the fact that later problems are often preceded by early problems, that early discovery of these problems could be facilitated by early preventive and therapeutic intervention. The observations found to have the greatest significance were those based on the child's interpersonal relationships rather than on the behaviour of the child as an individual. Interactions between the teacher and the child's family were also found

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<sup>1</sup>Jack C. Westman, Dale L. Rice, and Eric Bermann, "Nursery School Behavior and Later School Adjustment," American Journal of Orthopsychiatry, 37, 4 (1967), pp. 725-731.

<sup>2</sup>Westman, Rice, and Bermann, p. 728.

to be significant in identifying later problems of adjustment. The study concluded by contending that

the nursery school...provides access to families in ways not present during later years. This close interaction between nursery school personnel and parents is a sensitive and critical avenue for identifying and remedying problems and influencing child-rearing techniques, and, to some degree, family living.<sup>1</sup>

A later study supports the findings of Westman, Rice, and Bermann, as well as other studies that show the strong correlation between behaviour patterns of children in nursery school and their later functioning in school. Chamberlin and Nader<sup>2</sup> point out that recent clinical reports focus on the relative ease with which modification of preschool behaviour patterns can be accomplished by both teachers and parents. Subjects for the study

were selected solely on the availability of both nursery school and later school records. Of the total of 400 children enrolled in the school, only about fifty (or, 12.5 per cent) had attended nursery school. The first forty records of these children were taken for the study. At the time of the study, twenty-one of the children were in second grade, twelve were in grades four through six, and seven were in grades seven or eight.<sup>3</sup>

Anecdotal comments were gleaned from the school record, recorded on separate pieces of paper, and identified only by a code number. The authors then blindly and independently

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<sup>1</sup>Westman, Rice, and Bermann, p. 730.

<sup>2</sup>Robert W. Chamberlin and Philip R. Nader, "Relationship Between Nursery School Behavior Patterns and Later School Functioning," American Journal of Orthopsychiatry, 4; 4 (July, 1971), pp. 597-601.

<sup>3</sup>Ibid., p. 598.

rated the written comments, going largely from their overall impressions of how little or much was on the paper ...often only one or two sentences descriptive of the child. Each child was then placed in the appropriate category: below average functioning; average; and, above average.

The authors designed their study to examine and test how well teacher descriptions of nursery school behaviour recorded in a rather subjective and somewhat unsystematic way may be used to predict later school functioning. The study's findings showed a significant relationship between nursery school functioning and functioning in later school years, and suggests that better methods of measurement should enable future researchers to identify a " 'high risk' group of children with enough accuracy to warrant an attempt at early intervention."<sup>1</sup>

Harth and Glavin hypothesized that teacher ratings were a valid screening technique in distinguishing varying degrees of personality adjustment. Their study measured the degree of agreement of teachers' ratings with an objectively scored criterion, the California Test of Personality (CTP). They noted that "while the CTP was not a definitive measure of specified traits, it did single out persons who freely checked symptoms and self criticisms."<sup>2</sup> By completing

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<sup>1</sup>Chamberlin and Nader, p. 600.

<sup>2</sup>Robert Harth and John P. Glavin, "Validity of Teacher Rating as a Subtest for Screening Emotionally Disturbed Children," Exceptional Children, 37, 8 (April, 1971), pp. 605-606.

a rating sheet, teachers selected the students whom they judged to be the five best adjusted and the five poorest adjusted in their classes. The teachers were not given any guidelines for determining emotional disturbance or adjustment. The CTP was administered to the students after the teachers had done their ratings.

Results of this study showed that the group judged by their teachers to be better adjusted had a statistically significant higher mean CTP score than the poorer adjusted group. It was concluded that such ratings by teachers are a valid technique for screening emotionally disturbed children, but it was suggested that actual classroom observation would provide valuable supplementary information to confirm or refute the ratings.

A study of teachers' ratings of student personality compared to the student's achieved Intelligence Quotient (IQ) score was conducted by Barnard, Zimbardo and Sarason.<sup>1</sup> While this study did not completely contradict the Harth and Glavin findings, it did focus on some areas of risk in the matter of teacher ratings, especially in the evaluation of nonacademic behavioral traits. Early assessments of the student's personality traits are used not only as predictors of his performance at the elementary school level, but may

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<sup>1</sup>James W. Barnard, Philip G. Zimbardo, and Seymour B. Sarason, "Teachers' Ratings of Student Personality Traits as They Relate to IQ and Social Desirability," Journal of Educational Psychology, 59, 2 (1968), pp. 128-132.

even follow him to graduate and professional schools. Further, it should be recognized that

the formal categorization of student personality traits by teachers can exert not only a controlling influence on how the particular teacher then perceives, organizes, and interprets later behavior, but as part of the student's record, it may also establish the frames of reference through which subsequent teachers view the student. The question of how well teachers can perform such an evaluation function is obviously of first-rate importance.<sup>1</sup>

These researchers addressed themselves, therefore, to an investigation of the ability of elementary school teachers in two areas: one, their ability to discern in their classes differences among students in relevant and important personality variables, and, two, their ability to check the relationship between the ratings given to the students on these personality traits and the student's achieved score on a measure of IQ.

The results showed that the teachers did not make statistically significant distinctions in the area of personality traits, but did make statistically significant discriminations on the basis of IQ. The conclusion reached by this study was that the results

cast some doubt on the validity of ratings by elementary school teachers of student personality traits. The present teachers were unable to distinguish reliably between (the personality traits tested).<sup>2</sup>

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<sup>1</sup>Barnard, Zimbardo, and Sarason, p. 128.

<sup>2</sup>Ibid., p. 130.

There was a statistically significant differential between the ratings these teachers gave to children with high IQ scores and those with low IQ scores. The clearest distinction was made between IQ levels on those personality traits considered by the teachers to be most desirable or undesirable for the 'ideal' student. The questions this study raises as possible areas for future research are to what extent a teacher's knowledge of a child's IQ influences the teacher's methods of handling the student, and how the student recognizes, perceives and reacts to such differential treatment.

Although the two studies just cited seem to reach opposite views on the question of teacher ratings, such a means of measurement was used in the present study for reasons of time limitations, as well as to replicate closely a similar study by Ann Wilson Brown.<sup>1</sup> Whereas the present study was concerned with day care centres, Brown studied nursery school attendance, including a history of the nursery school movement in the middle 1800's.

The changing functions of the nursery school were outlined by Brown, ranging from the role of a social welfare agency to a substitute for a child's home life, to the point where the socialization and emotional development of the

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<sup>1</sup>Ann Wilson Brown, "The Effect of Nursery School Attendance Upon Teachers' Ratings of Some Aspects of Children's Adjustment in Kindergarten," (unpublished M.A. thesis, Washington University, Saint Louis, Missouri, 1960).

child became paramount.

As did this writer, Brown's review of the literature revealed that there were some studies that supported the view that attendance at nursery school enhanced the later adjustment of the student to kindergarten and subsequent grade school. But also, there seemed to be an equally persuasive argument in the conclusions of still other studies that the exact opposite held true, and that children were far less likely to adjust well to the kindergarten setting if they had first gone to nursery school.

A flaw in Brown's study was her use of an experimental design. Because no manipulation of variables occurred, it would seem incorrect to use the terms "experimental" and "control" groups. Chapter III of this study discusses this question.

#### Summary

This chapter outlined a review of the literature, including studies proclaiming both the advantages and disadvantages of pre-kindergarten attendance at day care centres. A concensus in either direction was not evident.



## CHAPTER III

### THE RESEARCH DESIGN

#### Purpose of the Research

This thesis was undertaken to investigate certain aspects of adjustment in kindergarten children, one-half of whom had previously attended a day care centre and one-half of whom had not. An entire class of day care centre "graduates" was followed to the respective kindergartens of its members, and, as in Brown's study, each child who had attended a day care centre was matched by sex, IQ, socio-economic status (SES) and ordinal position in the family with a non-day care centre child. The kindergarten teachers then rated each child on four aspects of social adjustment, plus a forced-choice rating of relative brightness. By use of these five ratings it was hoped that additional light would be shed on the relationship, if any, between attendance at a day care centre and subsequent adjustment in kindergarten.

#### Hypothesis

From the review of the literature, it appeared that for some children at least the transition from the relatively unstructured milieu of the day care centre to the comparatively structured setting of the kindergarten is a

difficult and perhaps even traumatic experience because of the way in which they are perceived by their kindergarten teachers. While the literature would seem to support a hypothesis in either direction, for the purpose of this study the following hypothesis was made: attendance at a day care centre will have a negative influence on a child's social and personal adjustment to kindergarten, as that adjustment is perceived by his kindergarten teacher.

#### Working Definitions

The Concise Oxford Dictionary defines adjustment as "adapting (to standard or purpose)."<sup>1</sup> Adjustment is to something that represents the context in which adjustment is assessed, such as an object, person, group, or circumstance. Adjustment involves observable patterns of behaviour, so judging adjustment means consideration of certain behaviour patterns as they relate to certain goals. That is, adjustment deals with goal-seeking behaviour of the individual, thus encompassing means-end relationships.

Assessment of adjustment needs an evaluative operation performed by an observer of the behaviour in question. Put in a formula form, evaluation equals the behaviour plus the end goal of the behaviour, plus the observer's value scale. Therefore, assessments of adjustment may vary as any of the three component elements in the above "formula" vary.

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<sup>1</sup>Concise Oxford Dictionary, Fourth Edition, 1958.

In this study, assessment of adjustment was assumed to involve the operation of value judgment(s) by an observer, thus making the rating scale a reasonable choice of measuring tool because it allows for the operation and recording of value judgments.

The children who had attended a day care centre were referred to as the "reference group", and those who had not attended a day care centre as the "comparison group."

Because of the lack of a uniform terminology in the literature to describe the preschool institution, it will be necessary to define what this study refers to as a day care centre. In an historical review of early childhood education in the United States, Omwake described two similar preschool programs, stressing that the crucial factor involved was not one of curriculum or goals of the program, but rather the

degree of importance attached to the quality and nature of the teacher-child relationship as a factor in the child's ability to learn and the significance of play as a primary mode of learning in three- and four-year-old children.<sup>1</sup>

Omwake found that in what was called the Academic Preschool the belief was held that the program should be geared to "develop the children's skills for intellectual mastery so that they can enter the world of symbolic learning

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<sup>1</sup>Eveline Omwake, "Preschool Programs in Historical Perspective," Interchange, 2, 2 (1971), p. 28.

as early as possible."<sup>1</sup> Essentially, then, this model for preschool education concerns itself mainly with the development of cognitive and intellectual factors that are deemed foundational to successful academic achievement in the later years.

The other model, the Modern American Nursery School, aims at an integration of physical, social, and behavioural, as well as intellectual skills, to enable the child to cope better with the complexities of his changing environment. The children are expected to master cognitive skills, to learn to control their behaviour, and to care for themselves in an independent way both in play and non-play activities, to try new tasks, and to venture into untried challenges. Emphasis is placed on getting along with one's peers, whether this involves simply waiting, or sharing, or yielding at the appropriate time, as well as demonstrating appropriate resistance when and if one's rights are being unfairly challenged. The above skills are not formally "taught" as such, but are expected to be learned in various situations during the day, such as in spontaneous play. Perhaps the essential difference in the two models is that the teacher's role in the latter is mainly supportive rather than directive as it is in the Academic Preschool.

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<sup>1</sup>Omwake, p. 29.

Swift<sup>1</sup> distinguishes the nursery school from the day nursery by pointing out that there are three main differences in the two program types, and that these are:

(a) the functions served for the community; (b) the relative proportions of the child's time spent in the program; and (c) the central emphasis of the program.

The day nursery serves the function of substituting for maternal care of the child during a major part of the day. It puts emphasis upon meeting the basic developmental needs of the child--physical, emotional, social, and intellectual--during that period.

The nursery school serves as a supplement to the home experience of the child, covers a relatively shorter period of time, and places its primary emphasis upon selective educational experiences.<sup>2</sup>

It is Swift's definition of the day nursery that most closely delineates the milieu of the day care centre as this term is used in this study.

### Subjects

A total of twenty-six subjects participated in this study. One-half of these had attended the Lauzon Road Day Care Centre in Windsor, Ontario, during 1971-1972, that is, the year prior to the study. There were fifteen graduates from the 1971-1972 Day Care Centre term, eleven girls and four boys. At the time the data were collected, one girl had moved out of the area and one boy was absent from school on the day of testing for the purpose of subsequent matching.

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<sup>1</sup>Joan W. Swift, "Effects of Early Group Experience: The Nursery School and Day Nursery," in Review of Child Development Research, ed. by Martin L. Hoffman and Lois W. Hoffman (New York: Russell Sage Foundation, 1964), pp. 249-287.

<sup>2</sup>Ibid., pp. 250-251.

### Materials

Four independent rating scales<sup>1</sup> were constructed according to criteria suggested by Guilford.<sup>2</sup> Each of these was separately printed on 8-1/2" by 11" sheets, and consisted of a continuous, five-inch long line with points marked "very good," "good," "fair," and "poor" at one inch intervals along the vertical line. One inch was left between the lowest point marked, "poor," and the origin of the scale, as well as between the highest point, "very good," and the terminus. This procedure allowed the rater to choose any point along the scale deemed appropriate, (the marked points representing orientation guides only) and had the additional merit of spreading the ratings, thus helping to control any central tendency error. These scales were reproduced just as they were used in Brown's study.<sup>3</sup>

These four scales represent the adjustment scales. The first of these, the "activity" scale, considers the general level of adjustment as exhibited by the child in routine attitudes toward and participation in usual classroom activities. The second, the "group" scale, refers to the child's general level of adjustment not only to children in his class but to his peers in the rest of the school.

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<sup>1</sup>Appendix, p. 59.

<sup>2</sup>J.P. Guilford, Psychometric Methods (New York: McGraw Hill, 1954).

<sup>3</sup>Ann Wilson Brown, p. 49.

The third, the "authority" scale, refers to the general level of adjustment exhibited in the child's routine relationships with the teacher. The fourth, the "personal" scale, refers to the general level of adjustment which the teacher feels characterizes the child as a person, considering her knowledge of the child both within and outside of the classroom, and also in terms of "inner" adjustment. These four scales were construed as being at least partially independent facets indicative of general social and personal adjustment, as well as four primary aspects of the child's general or overall school adjustment.

A fifth rating,<sup>1</sup> of relative brightness, was obtained by a forced-choice procedure. The names of paired children were listed and the rater was asked simply to encircle the number opposite the name of that child whom she felt was the "brighter" of the pair. Even if the two seemed to be about equally bright, the rater was instructed always to choose one. This scale was also printed on an 8-1/2" by 11" separate sheet, and included, in addition to the names of the critical pair, paired names of two other children selected at random from the same class. In this way it was hoped to exercise some control over possible biasing effects attributable to the rater's possible knowledge of the purpose of the ratings, thus minimizing the effect upon

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<sup>1</sup>Appendix, p. 65.

the brightness ratings of any central tendency in the four adjustment ratings.

The five scales were bound together with a face sheet containing spaces for the child's name, his school, and his teacher's name, together with general instructions concerning the completion of the rating scales. This formed a six-page booklet.<sup>1</sup>

#### Procedure

Permission to conduct the study was obtained from both the Windsor Board of Education and the Windsor Separate School Board. Six public schools and five separate schools were involved in the study.

The principals of the relevant schools were contacted, told of the study's purpose, and asked not to mention its nature to the kindergarten teachers. Thus, the eleven teachers participating in the study were kept ignorant of the study's purpose until after the ratings were completed.

Information concerning the occupation and education of the major wage earner within the child's family, the child's ordinal position in the family, and the school attended by the day care centre child was obtained by direct telephone contact with the parents prior to the matching of the replicate pairs. The same information for the comparison children was obtained from either the child's OSR, that is,

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<sup>1</sup>Appendix, p. 60.



Ontario School Record in the particular school the child was attending, or by telephone contact with the parents.

Children were matched by IQ, sex, ordinal position in the family, and SES. Ratings were on four aspects of social adjustment and on perceived relative brightness. Because adjustment is considered adjustment to something, and because that something could include innumerable criteria of general adjustment, the four particular aspects of adjustment in kindergarten were selected to avoid the confusion of too many choices. That is, differentiated measures of several facets of adjustment were employed rather than some global concept, thus permitting the teacher to differentiate her ratings in a similar way. The "brightness scale" was added to investigate any possible relationship between perceived brightness and adjustment.

The basic structure of the study was a paired replicates model.<sup>1</sup> That is, the comparison child was matched to the selected characteristics of the reference child as closely as possible.

SES was determined by the use of Hollingshead's Two Factor Index of Social Position.<sup>2</sup> Five status levels are discriminated by this scale, based upon education and occupation of the principal wage earner, with occupation being

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<sup>1</sup>Ann Wilson Brown, p. 25.

<sup>2</sup>A.B. Hollingshead, Two Factor Index of Social Position (New Haven: Yale University, 1957).

heavily weighted.

All the children in this study were from middle- and lower-middle-class families, with 11.5 per cent in the highest SES group, 11.5 per cent in the second, 27 per cent in the third, 50 per cent in the fourth, and none in the lowest.

Of the two SES groups, the reference group had 3.8 per cent in the highest category, 11.5 per cent in the second, 11.5 per cent in the third, 23.1 per cent in the fourth, and none in the lowest. The comparison group had 7.7 per cent in the highest category, none in the second, 15.5 per cent in the third, 26.9 in the fourth, and none in the lowest.

Ordinal position in the family was described in terms of "only child," "oldest child," "youngest child," or, "intermediate position." If day care centre families were found to be relatively small, then matching for ordinal position would provide a partial control for differences in the family sizes of the day care centre and non-day care centre children.

Forty-two decimal three per cent of the subjects were in the "only child" group, 30.8 per cent were first borns, 26.9 per cent were the youngest or younger member of their family, and none was in the intermediate category. The youngest reference children were two who were five years, six months, and the oldest was six years, one month. Of the twenty six subjects, six were boys. IQ's ranged from 97 to

143 for the reference group, with none in the comparison group exceeding that range and only one lower than the bottom of the range at 91.

IQ was determined by individual administrations of the Peabody Picture Vocabulary Test (PPVT) to each child in the reference and comparison groups, within a two week period prior to the ratings by the teachers.

The above-mentioned variables seemed to be the most important to control for purposes of this study, although it was recognized that there are various antecedent and intervening variables that could influence the outcome of the study but which are beyond the reasonable limits of research control. Examples would be such things as the number of times the child had moved from home to home or community to community, as well as here-and-now influences such as community activities and interpersonal encounters outside of the family.

In cases where it was not possible to find a perfect match for each reference child from among children in the same class, the first criterion to be considered, when looking for a match, was to find a child who had not been to a day care centre. In a few cases it was not possible to match ordinal position in the family exactly, so it was equated as closely as possible, that is, to the next higher category. IQ was matched to within six points with only one exception where the difference was twelve points. SES and sex were matched in all cases. Generally, each reference

child was well matched with a comparison child in all respects.

After this writer had matched a reference child with a comparison child, their teacher was given one of the rating scales to fill out for the matched pair and for six other children in the class who had been randomly selected and paired. This was intended to mask the matching of the critical pair. Due to time limitations, rating scales for each entire class were not given to the teachers.

The teacher was left relatively free to employ whatever criteria was deemed relevant in making the ratings--- only general orienting suggestions were made on each of the rating scales. Comments on each of the ratings were also asked of the teacher if they felt any were necessary to qualify their rating. In Brown's study,<sup>1</sup> about one-half of the teachers made some comment, but no formal analysis was made of these since nothing resulted which affected the rating scale in any way.

The booklets were picked up by this writer one week after they had been given to the teachers.

#### Summary

This chapter stated the hypothesis of the study, defined ambiguous terminology, and distinguished between the

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<sup>1</sup>Brown, p. 29.

often interchangeably used labels of day nursery and nursery school. The materials used and the methodology of obtaining the data were explained.

## CHAPTER IV

### ANALYSIS OF THE DATA

After the various ratings had been obtained according to the procedure outlined in Chapter III, each of the four adjustment scales was arbitrarily divided into ten equal intervals and quantified by assigning to each interval a numerical value ranging from "1" for the lowest interval to "10" for the highest. In this way, each rating could be scored from one to ten, with a score of "1" indicating the poorest level of adjustment, and a score of "10" indicating the highest level.

None of the ratings occurred in either the highest or the lowest two intervals. The adjustment ratings on each scale, therefore, ranged from "3" through "9" inclusive, with "7.5" the modal rating. In the distribution of the individual ratings, skewness occurred toward the high end of the scale, suggesting a possible halo effect. There were 22.12 per cent of the ratings in the "9" grouping, 25.96 per cent in the "8" and "7", 11.54 per cent in the "6", 12.50 per cent in the "5", and only 0.96 per cent in the "4" and "3" groupings respectively.

Differences in rated adjustment between the reference and the comparison children were evaluated by performing

independent one-tailed "t" tests of the difference between the mean adjustment scores for each group on each of the four adjustment scales, with the analysis of these results following a procedure for paired observations suggested by Dixon and Massey.<sup>1</sup> In Table 1, "N" represents the number of pairs, not subjects.

TABLE 1

MEAN SCORES ON FOUR TYPES OF SOCIAL ADJUSTMENT IN DAY CARE CENTRE AND NON-DAY CARE CENTRE CHILDREN

SOCIAL ADJUSTMENT SCALE	Mean Score		"t"
	DCC (N = 13)	NON-DCC (N = 13)	
Activities	7.31	7.23	0.128
Group	7.08	7.08	0.000
Authority	7.46	7.23	0.426
Personal	7.23	7.54	-0.547

p = .05

As can be seen from Table 1, there is no significant difference between the mean ratings for the two groups of children. These results indicate, then, that with respect to the four adjustment scales the teachers perceived

<sup>1</sup>W.J. Dixon and F.J. Massey, Introduction to Statistical Analysis (New York: McGraw-Hill, 1957).

no significant difference between those children who had attended a day care centre and those who had not.

Evaluation of the teacher's ratings of the relative brightness of the reference and the comparison children was done by the non-parametric sign test described in Walker and Lev.<sup>1</sup> Because of the method by which these ratings were obtained, it seemed best to employ a method relatively free from parametric assumptions concerning the variable being measured. Also, since difference of direction is the only factor being considered, the sign test for paired replicates seems to be fully appropriate. Using both the one-tailed and the two-tailed tests at the .05 and .01 levels of significance, the results fall well within the region of acceptance for the null hypothesis, that is, that the median of the differences of the signs is not significantly different from zero. The data would indicate, then, that the teachers in this study did not perceive any significant difference in the relative brightness between the reference and the comparison groups.

To determine the extent to which the various adjustment ratings co-varied with the teacher's ratings of the children's brightness, point bi-serial correlations were calculated between the brightness ratings and each of the four adjustment ratings. Point bi-serial correlations were

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<sup>1</sup>H.M. Walker and J. Lev, Elementary Statistical Methods (New York: Holt, 1958).



selected here because it is not known to what extent the dichotomous brightness ratings may range along some underlying continuum of intelligence. The children were divided, regardless of day care centre attendance, into two categories: one consisting of those children whom the teacher rated as "brighter" and the other including the children whom she did not so rate. Point bi-serial correlations were then computed between the dichotomous brightness ratings and each of the four adjustment scales, following a procedure described by Guilford.<sup>1</sup> See Table 2. In this table, N refers to the number of pairs, not the number of subjects.

TABLE 2

POINT BI-SERIAL CORRELATIONS BETWEEN INTELLIGENCE AND FOUR ADJUSTMENT RATINGS (N = 13)

Scale	Correlation
Activities	0.276
Authority	0.255
Group	0.233
Personal	0.234

Although all four correlations are significantly different from zero, there is only a slight relationship between brightness ratings made by the kindergarten teacher

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<sup>1</sup>J.P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill, 1956).

and her ratings on the four adjustment scales. Any such correlations in this study would approach zero due to the matching procedure. The purpose of the analysis performed in the point bi-serial correlations was to try to determine whether or not children rated "brighter" would show correlative variations in rated adjustment. The results obtained seem to negate such a possibility.

Median tests<sup>1</sup> were used as an additional measure to test any possible relationship between the teacher's ratings of brightness and the adjustment ratings. The results of the bi-serial correlations were supported by the median tests, and no significant relationship between any of the four adjustment ratings was found. In all instances, the null hypothesis was supported, that the relationship between the teacher's ratings of brightness and the adjustment ratings was not significantly different from zero.

Apparently then, when actual variations in IQ are controlled, it would appear that the teacher's ratings of adjustment vary independently from how they perceive and rate the relative brightness of the children.

Product moment correlations were computed between the various adjustment ratings to determine the degree of relationship among the scales. Each rating was correlated with each of the others, resulting in a matrix of six

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<sup>1</sup>S. Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill, 1956).

correlations.

TABLE 3  
PRODUCT MOMENT CORRELATIONS BETWEEN THE FOUR  
ADJUSTMENT RATINGS (N = 13 pairs)

SCALE	Activities	Authority	Group
Authority	0.935	-----	-----
Group	-0.843	0.932	-----
Personal	0.963	0.970	0.932

Ratings for all of the children were pooled, regardless of whether or not they had been to a day care centre. The figures shown in Table 3 indicate that strong relationships exist between the teacher's ratings of the various aspects of overall adjustment chosen for the study. The highest degree of correlation was between the teacher's ratings of personal adjustment of the child and his adjustment to authority, and may indicate a possible bias on the part of the teacher as to what constitutes "good" personal adjustment. That is, if the child submits favorably to the authority of the teacher, the teacher perceives this child as having "good" personal adjustment. In the same sense, the negative correlation seen between the way the child adjusts to group or peer interaction and how he adjusts to the more structured activities in the classroom may be seen, too, in the light of a child's personal characteristics. A child who

is aggressive enough to be a leader or initiator of activities amongst his peers may carry this same trait over into the classroom setting where it is not acceptable to the teacher if it conflicts with the organized format of activities she has planned.

Finally, the fact that the correlations reported in Table 3 closely approach 1.00 (the mean  $r$  is approximately 0.93) is not consistent with the assumption made in the construction of the adjustment rating scales, that is, that each of the scales would tap an aspect of general adjustment at least partially independent of the others. Had the mean  $r$  been in the approximate area of 0.60, this assumption would have been supported, but the achieved results indicated in Table 3 seem to suggest that either there is a very close relationship among the four scales, or, that the teachers in the present study perceived the scales as being closely related, or both.

Brown<sup>1</sup> found that the correlation between the teacher's ratings of personal adjustment of the child and his adjustment to authority was the least consistent of the correlations, which is just the opposite to the findings of this study. She offers no comment as to the importance of this finding.

Discussion of the importance of the findings of this study, conclusions and summary, will follow in Chapter V.

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<sup>1</sup>Ann Wilson Brown, p. 35.

Summary

In this chapter the findings of the study were discussed and statistically analyzed. The various statistical tests were described, and tables illustrated the results of the analysis. It was found that the null hypothesis was supported, that is, that attendance at a day care centre had no statistically significant influence on a child's social and personal adjustment to kindergarten, at least as that adjustment was perceived by the kindergarten teachers of the subjects of this study.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

The results of this study do not support the hypothesis that attendance at a day care centre will have a negative influence on a child's social and personal adjustment to kindergarten, as that adjustment is perceived by his kindergarten teacher. Rather, the null hypothesis is supported that differences in adjustment between the Reference and the Comparison groups as perceived by the kindergarten teachers involved in this study, are not significantly different from zero.

Specifically, the teachers perceived no significant difference in the relative brightness of the Reference and Comparison groups, and further, they apparently rated adjustment independently of the way they rated brightness, as there was no significant correlation between the two ratings.

The strongest positive intercorrelation occurred in the teachers' ratings of personal adjustment and adjustment to authority. This may, as suggested in the previous chapter, indicate some degree of bias on the part of the teacher in defining what constitutes good personal adjustment. In other words, if the child is perceived by the teacher to be well adjusted to authority, then he is also likely to be

seen by his teacher as well adjusted personally. The least consistent of the intercorrelations was also the only negative correlation in the matrix, and that was between Group adjustment and Classroom adjustment. Comments as to the possible reasons for and significance of these correlations are briefly mentioned on page 47.

There are other factors, of course, one of which may be that

...in many schools there is no place for experimentation and 'successful' failures. Learning is expected to follow a pattern of presentation, absorption, and regurgitation. ...If a child does not understand, or misses a thought in class, he quietly sits and accepts this as a part of his conception of school. Failure is something he both fears yet expects. Spontaneity gives way to silence; excitement becomes equated with a special occasion, not with learning or the educational process.<sup>1</sup>

So it is not surprising that the teacher may equate quiet acquiescence to classroom routines with good personal and classroom adjustment. This is not necessarily best for the child, however, because

...If children are accustomed to accept mistakes as part of their daily school life and learn that they can achieve better due to these mistakes, their self-esteem is nourished. Only when a child feels adequate in overcoming obstacles, in thinking on his own, and in attempting the more difficult tasks can effective learning take place.<sup>2</sup>

While the results of this study appear to be generally inconclusive either in favour of the advantages of

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<sup>1</sup>Calvin C. Sloan, "Freedom to Make Mistakes," Childhood Education, 44, 3 (November, 1967), p. 168.

<sup>2</sup>Ibid., p. 173.

attendance at a day care centre prior to entry into kindergarten or clearly delineating the disadvantages in terms of subsequent adjustment to kindergarten, the study serves as an academic research model which other investigators may use in revised form to investigate this same area of concern.

It has been pointed out that there is a need to distinguish carefully between the terms "nursery school" and "day care centre", at least as they were in use at the time of this study. Further research would perhaps produce more conclusive results if the population to be studied was not limited, to one day care centre as it was in this study. The limitations here were ones of time and manageability, and without these restrictions a more applied type of research would have been possible.

The results obtained in this study were not representative of any particular population, and generalizations are therefore not possible. However, several of the studies noted in the review of the literature do lead to generalizations to the general population, with the concensus seeming to indicate that attendance at nursery school or day care centre prior to entry into kindergarten has a significant influence on the later adjustment of the child. Whether or not that influence enhances or disrupts later adjustment is not a matter for general agreement.

There are several aspects of this present study that evoke questions and suggest areas for further study and concern. First, perhaps, is the matter of the validity of



using teacher ratings as a means to gather the data. Results of a study by Barnard, Zimbardo, and Sarason "cast some doubt on the validity of ratings by elementary school teachers of student personality traits."<sup>1</sup> (See pp. 23-24 of this study.)

Another factor that might weaken the validity of the use of teacher ratings was Cushing's conclusion that kindergarten teachers may have "a certain antagonism and distrust of the nursery school...so that she may unconsciously be more highly critical of the nursery-trained child."<sup>2</sup> Moore lends support to this view by stating that

teachers sometimes decide in advance that they approve or disapprove of the behaviour of children who attended a particular nursery school. They may compare all children who come from nursery schools with the stereotyped picture they have formed of children from this (particular) nursery school.<sup>3</sup>

This stereotyped bias, if it existed, would probably influence any ratings the teacher might make. Moore goes on to say that

frequently the non-conformists in such situations are referred to as problems, while in reality the school program itself may be to blame. Nor is it necessarily true that the conformists suffer any lesser damage to their personality development from the stress and rigidity of such programs.<sup>4</sup>

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<sup>1</sup>Barnard et al., p. 130.

<sup>2</sup>Cushing, p. 311.

<sup>3</sup>Elenora H. Moore, Fives at School (New York: Van Rees Press, 1959), p. 232.

<sup>4</sup>Ibid., p. 9.

These problems, Moore says, may arise in kindergarten where

...the busy assembly-line approach to art... (such as) ...turning out 40 identical May baskets in each group is regarded as meritorious achievement. (These kindergartens) are particularly hard on those delightful non-conformist (five-year olds) whose own initiative is stronger than the endless teacher prescriptions for making art objects.<sup>1</sup>

The question could well be asked, then, whether or not the general freedom and lack of restriction of the day care centre program is inimical to later adjustment in kindergarten? The teacher may justifiably perceive normal day-care-centre behaviour as rebellion against her, whereas if the child finds the kindergarten program redundant it may produce boredom and a tendency to show off what he has already learned.

Other questions raised by the study concern the possible control of adjustment prior to entry into a day care centre. Are more problem children sent to day care centres, thus creating a selective factor in the population being studied? If so, a co-variance design could be used to assess the effects of day care centre attendance on adjustment in kindergarten. The question of why parents send their children to day care centres could be explored more fully as well, and future studies could be of a more longitudinal nature to follow the students to the high school level to see how long any adjustment problems persist. In a study that tested students at the six, eleven, and fifteen-year old

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<sup>1</sup>Moore, p. 121.

years, Douglas and Ross concluded that

for the majority, the increase in symptoms or signs of disturbed behaviour is related to lower performance of each age tested..(which)..would suggest that the basis of their educational difficulties lies in the pre- or early school years.<sup>1</sup>

If, as suggested in Chapter I, the preschool years present the optimum opportunity to intervene, then what basis is there to undertake such intervention? Blank suggests that "the hope for any modifiability rests strongly on the idea of early intervention."<sup>2</sup> And she goes on to say that even when the success of such programs of intervention is limited, they

have the advantage of being based upon delineated, testable hypotheses which are necessary to help us go beyond the original approach of overall enrichment. In this way the nursery school can assume the vital function of serving as the natural laboratory for studying the processes of thinking in early development. Thus, properly designed intervention programs may perform the dual function of advancing basic knowledge in human behaviour as well as positively affecting the children under their aegis.<sup>3</sup>

A study by Silverman and Wolfson concluded that maximal use can be made of professional personnel when they are utilized directly in day care centers serving lower-class children, (and also) found the day care center to be an ideal locale for the employment of individual psychotherapeutic techniques early enough in the lives of disadvantaged children to help them overcome the deleterious influences

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<sup>1</sup>J.W.B. Douglas and J.M. Ross, "Adjustment and Educational Progress," British Journal of Educational Psychology, 38, 1 (1968), p. 3.

<sup>2</sup>Marion Blank, "Implicit Assumptions Underlying Preschool Intervention Programs," Journal of Social Issues, 26, 2 (Spring, 1970), p. 16.

<sup>3</sup>Ibid., p. 30.

that threaten to stunt and cripple them.<sup>1</sup>

They conclude their study by saying that

If the pattern of emotional distress in one generation after another is to be disrupted, primary prevention will have to be supplemented by secondary preventive techniques to help prepare tomorrow's parents for their crucial child-rearing role.<sup>2</sup>

What role can social work play in programs of early intervention? Until recently, the role would probably have been the stereotyped one of intake worker or as a counsellor to parents of some of the more disturbed children. While the above-mentioned roles are not to be belittled, the social worker is in the position to have primary responsibility for the entire family, including planning for the child. As a study by McDermott states,

...the mushrooming of family and child development programs and related staff shortages, suggests new conceptions of social work roles in the day care field as a whole and within each individual agency setting. The social worker's responsibility becomes not merely one of intake and some parental counselling; there is an additional commitment for him to become more effective in his professional services. ...It frees a social worker...to interact with the (other) staff..., advises him to communicate family goals as well as child-rearing goals to the staff, (and) stimulates him to have interviews with teachers and parents together and to encourage free interchange of ideas between all staff.<sup>3</sup>

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<sup>1</sup>Martin A. Silverman and Eva Wolfson, "Early Intervention and Social Class: Diagnosis and Treatment of Pre-school Children in a Day Care Center," Journal of the American Academy of Child Psychiatry, 10, 4 (October, 1971), p. 617.

<sup>2</sup>Ibid.

<sup>3</sup>Sister Mary Thomas McDermott, "The Challenge of Day Care," Journal of the Child Welfare League of America, 46, 4 (April, 1967), p. 205.

It would, of course, also enable the social worker to help the child and his family cope with current problems by being able to make more accurate diagnostic assessments. The opportunity for on-the-spot treatment measures such as reality-oriented casework is readily available.

The presence of a social worker on the staff of a day care centre, then,

...can provide early recognition of physical, emotional, and social problems and facilitate the use of appropriate social services in the community so that serious breakdown is averted.<sup>1</sup>

It would seem then, that there is a fairly strong case to be made for early intervention by social workers in day care centre and other preschool programs. This area is one which could well be the subject of widespread future research.

#### Summary

This chapter summarized the implications of the study's findings and their statistical analysis. It was concluded that because of the small population used in this study, generalization of its findings could not be made because the results obtained were not representative of any particular population. However, this research did evoke questions relating to the role that social work could have

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<sup>1</sup>Matthew L. Pisapia and Albert F. Hanwell, "Social Work in Day Care," Child Welfare, 48, 5 (May, 1969), p. 272.

in preschool education settings. From the findings of other studies in this area of early intervention, a strong case was made for an expanded role for social workers in day care centres and other preschool programs.

APPENDIX

The Adjustment and Brightness  
Rating Scales

Name of Child \_\_\_\_\_

School \_\_\_\_\_

Name of Teacher \_\_\_\_\_

Please Read Carefully

You are being asked to make five separate ratings concerning some characteristics of the adjustment of the child named above. Please try to make each rating independently of the others, and as accurately as possible. On each of the next four pages you are to rate a particular characteristic as indicated on the page. You may employ whatever criteria you deem relevant, though certain general suggestions are offered.

Each of the first four pages contains a line with four points: "Very Good," "Good," "Fair," and "Poor," indicated. These points are intended as guides only. You may mark a point anywhere on the line which you feel best represents your estimate. For example, if the child is better than "Fair" but not "Good," mark the line somewhere between these points, wherever you think he or she fits best.

On the last page you will find special directions for the ratings to be made on it.

Please feel free to make any comments which occur to you. A space for these is provided at the bottom of each page.

Thank you for your cooperation and assistance.

Wayne A. Shaefer



Adjustment to Group Activities

Very Good  
Good  
Fair  
Poor

This scale refers to the general level of adjustment exhibited by the child in his routine attitudes toward and participation in usual classroom activities. Consider the child's ability to initiate activities, his willingness to join them, his need to be urged or his aloofness from them.

Comments:

Adjustment to Other Children

Very Good

Good

Fair

Poor

This scale refers to the general level of adjustment exhibited by the child in his day-to-day relationships with the other children in his class. Consider the child's natural leadership qualities, his ability to sometimes lead and sometimes follow, his desire always to follow or bossiness in always wanting to lead.

Comments:

Adjustment to Teacher

Very Good  
Good  
Fair  
Poor

This scale refers to the general level of adjustment exhibited in the child's routine relationships with you as his teacher. Consider the child's cooperation with you, his desire to be more than helpful, his wanting to have your attention or approval, or his lack of awareness of you.

Comments:

Personal Adjustment

This scale refers to the general level of adjustment that you feel characterizes this child as a person. You may consider both your knowledge of him within your classroom and outside of your classroom. You may wish also to think in terms of his "inner adjustment."

Comments:

Very Good

Good

Fair

Poor

Circle the number beside the name of the child in each pair who you consider to be brighter or more intelligent. In every case choose one, even if you feel that both are about equal.

1. \_\_\_\_\_ OR \_\_\_\_\_ 1.

2. \_\_\_\_\_ OR \_\_\_\_\_ 2.

3. \_\_\_\_\_ OR \_\_\_\_\_ 3.

4. \_\_\_\_\_ OR \_\_\_\_\_ 4.

5. \_\_\_\_\_ OR \_\_\_\_\_ 5.

6. \_\_\_\_\_ OR \_\_\_\_\_ 6.

Comments:

## BIBLIOGRAPHY

- Allen, Gregory B., and Masling, Joseph M. "An Evaluation of the Effects of Nursery School Training on Children in Kindergarten, First, and Second Grades." Journal of Educational Research, 51 (December, 1957), 285-296.
- Andrus, Ruth, and Horowitz, Eugene L. "The Effect of Nursery School Training: Insecurity Feelings." Child Development, 9, 2 (June, 1938), 169-174.
- Augenbraun, Bernice; Reid, Helen L.; and Friedman, David B. "Brief Intervention as a Preventive Force in Disorders of Early Childhood." American Journal of Orthopsychiatry, 37, 4 (1967), 697-702.
- Barnard, James W.; Zimbardo, Philip G., and Sarason, Seymour B. "Teachers' Ratings of Student Personality Traits as They Relate to IQ and Social Desirability." Journal of Educational Psychology, 59, 2 (1968), 128-132.
- Blank, Marion. "Implicit Assumptions Underlying Preschool Intervention Programs." Journal of Social Issues, 26, 2 (Spring, 1970), 15-33.
- Bonney, Merl E., and Nicholson, Ertie Lou. "Comparative Social Adjustments to Elementary School Pupils with and without Preschool Training." Child Development, 29 (1958), 125-133.
- Brown, Ann Wilson. "The Effect of Nursery School Attendance upon Teachers' Ratings of Some Aspects of Children's Adjustment in Kindergarten." Unpublished M.A. thesis, Washington University, Saint Louis, Missouri, 1960.
- Chamberlin, Robert W., and Nader, Philip R. "Relationship Between Nursery School Behavior Patterns and Later School Functioning." American Journal of Orthopsychiatry, 4, 4 (July, 1971), 597-601.
- Concise Oxford Dictionary, Fourth Edition, 1958.

- Cushing, Hazel, M. "A Tentative Report of the Influence of Nursery School Training upon Kindergarten Adjustment as Reported by Kindergarten Teachers." Child Development, 5 (1934), 304-314.
- Dixon, W.J., and Massey, F.J. Introduction to Statistical Analysis. New York: McGraw-Hill, 1957.
- Dobson, James. Hide or Seek. Old Tappan, New Jersey: Fleming H. Revell Company, 1974.
- Douglas, J.W.B., and Ross, J.M. "Adjustment and Educational Progress." British Journal of Educational Psychology, 38, 1 (1968), 2-4.
- Douglas, J.W.B., and Ross, J.M. "The Later Educational Progress and Emotional Adjustment of Children Who Went to Nursery School or Classes." Education Research, 7 (1964), 73-80.
- Guilford, J.P. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill, 1956.
- Guilford, J.P. Psychometric Methods. New York: McGraw-Hill, 1954.
- Harth, Robert, and Glavin, John P. "Validity of Teacher Rating as a Subtest for Screening Emotionally Disturbed Children." Exceptional Children, 37, 8 (April, 1971), 605-606.
- Hollingshead, A.B. Two Factor Index of Social Position. New Haven: Yale University, 1957.
- Jersild, Arthur T., and Fite, Mary D. "Children's Social Adjustments in Nursery School." Journal of Experimental Education, 6, 2 (December, 1937), 161-166.
- Joel, Walther. "The Influence of Nursery School Education upon Behavior Maturity." Journal of Experimental Education, 8 (December, 1939), 164-165.
- McDermott, Sister Mary Thomas. "The Challenge of Day Care." Journal of the Child Welfare League of America, 46, 4 (April, 1967), 203-206.
- Moore, Elenora H. Fives at School. New York: Van Rees Press, 1959.
- Omwake, Eveline. "Preschool Programs in Historical Perspective." Interchange, 2, 2 (1971), 27-40.

- Pisapia, Matthew L., and Hanwell, Albert F. "Social Work in Day Care." Child Welfare, 48, 5 (May, 1969), 268-272.
- Siegel, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.
- Silverman, Martin A., and Wolfson, Eva. "Early Intervention and Social Class: Diagnosis and Treatment of Preschool Children in a Day Care Center." Journal of the American Academy of Child Psychiatry, 10, 4 (October, 1971), 603-618.
- Sloan, Calvin C. "Freedom to Make Mistakes." Childhood Education, 44, 3 (November, 1967), 168-173.
- Swift, Joan W. "Effects of Early Group Experience: The Nursery School and Day Nursery." Review of Child Development Research. Edited by Martin L. Hoffman and Lois W. Hoffman. New York: Russell Sage Foundation, 1964.
- Van Alstyne, Dorothy, and Hattwick, LaBerta A. "A Follow-Up Study of the Behavior of Nursery School Children." Child Development, 10, 1 (March, 1939), 43-72.
- Walker, H.M., and Lev, J. Elementary Statistical Methods. New York: Holt, 1958.
- Walsh, Mary Elizabeth. "Brief Reports: The Relation of Nursery School Training to the Development of Certain Personality Traits." Child Development, 2 (1931).
- Westman, Jack C.; Rice, Dale L.; and Bermann, Eric. "Nursery School Behavior and Later School Adjustment." American Journal of Orthopsychiatry, 37, 4 (1967), 725-731.



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