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EFFECTS OF PRESCHOOL EXPERIENCE
ON KINDERGARTEN ADJUSTMENT

by
Laura Jane Sokal

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the Faculty of Graduate Studies
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of the requirements of the degree of
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LAURA JANE SOKAL

A Thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements for the degree of

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Abstract

The effects of type and duration of preschool peer experience on children's adjustment to Kindergarten were investigated. Forty-six Kindergarten children were randomly selected. Information about the type and duration of these children's preschool peer experience was obtained through a parent questionnaire. Categories for type of experience included center day care, family day care home, regular care by a sitter or relative, nursery school, church activities, sports activities, play group and other activities. Teachers evaluated the children's adjustment after two months of Kindergarten using the Child at School Schedule (Kysel et al., 1983). Statistical analysis indicated that there were no differences between the children who had participated in any particular type of preschool peer experience and those who had not. Effects of duration were that children who had medium duration (4025-5815 hours) of preschool peer experience were significantly better adjusted than those with low duration (0-3167 hours). Children with medium duration were also better adjusted than those with high duration (6704-10963 hours), though the difference was not significant. Additional analysis found that chronological age of Kindergarten children had no significant effect on adjustment scores, nor did the number of preschool peer experiences in which the children had taken part. Statistical analysis by gender, however, indicated that females were significantly better adjusted than males at the Kindergarten level. Directions for further research include investigation of variable interactions made possible with a larger sample size, studies using longitudinal designs in order to investigate the characteristics and quality of preschool experiences, and use of qualitative research methods to determine parental reasons for selection of type and duration of preschool peer experience.

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Chapter One: Introduction and Review of the Literature

Statement of the Problem

The effects of out-of-home care on subsequent social adjustment is a controversial issue within both the scholarly (Belsky, 1986, 1988; Clarke-Stewart, 1988) and popular presses (Howes, 1990). The purpose of this research was to study the relationship between children's adjustment to Kindergarten and the type and duration of their preschool peer experience.

Past research has been inconclusive and contradictory regarding the social effects of preschool peer experiences. Early research was limited to issues of parent-child bonding and subsequent research focussed on the effects of care-oriented settings. Few studies have investigated the effects of peer interactions on children's adjustment. Those that have looked at peer influences have stressed the serious consequences of peer rejection and early school maladjustment but have failed to provide strategies for avoiding these consequences.

In acknowledgment of the lack of past research as well as the grave consequences of maladjustment, the focus of this research is to investigate the relationship between children's type and duration of preschool peer experience and their adjustment to Kindergarten. By focussing on factors related to adjustment, this research may aid educators in supporting children's early school adjustment and may help parents in making the most appropriate choices of preschool peer experiences for their children.

Research Hypotheses

Because past research provided no clear pattern of findings regarding the effects of type and duration of care on children's Kindergarten adjustment, the hypotheses for this study were null statements. The hypotheses are: (1) the type of children's preschool peer experiences will not influence their adjustment to Kindergarten; (2) the duration of children's preschool peer experiences will not influence their adjustment to Kindergarten.

Definitions of Variables

Adjustment was defined as "...the outcomes of children's attempts to adapt to the demands of the school environment" (Ladd, 1990, p. 1083), and was represented by the children's scores on the Child at School Schedule (Kysel , Varlaam, Stoll, & Sammons, 1983). Type of preschool experience was defined as the activities in which the children participated with other children before entering Kindergarten. Type of program was described by category, those being center day care, family day care home, sports activities, church activities, play group, community club activities, nursery school, regular care by a baby-sitter or relative and other activities. Duration of preschool activities was defined as the total number of hours children attended preschool activities with their peers as calculated from information provided by the parents.

Review of the Literature

Importance and Effects of Adjustment to School

Children's ability to adjust to the Kindergarten school environment effects not only their outcomes in terms of success in Kindergarten, but is influential on future performance in and attitudes toward school and ultimately to school success or failure (Ladd & Price, 1987). In recognition of the implications of early school adjustment, researchers have begun to stress that social competence should be considered equally, if not in greater measure than children's academic skills as a gauge of school success in Kindergarten (Connolly & Doyle, 1981; Pellegrini & Glickman, 1990; Waters & Sroufe, 1983). Exploring and evaluating social competence has been difficult, however, because of problems in defining the construct. In 1978, Zigler and Trickett called upon social scientists to develop a practical definition and a coherent measure of social competence. More recent researchers have accepted that challenge. Pellegrini and Glickman (1990) accepted Zigler's and Trickett's (1978) position statement and suggested using multiple measures to achieve this goal. Pellegrini and Glickman felt that peer relations and school achievement were important, interdependent measures of school adaptation. They suggested that measuring social competence was best achieved using observational data, teachers rating scales, peer nomination measures and standardized tests. These views were reflective of those of many other social scientists (Anderson and Messick, 1973; Clarke-Stewart and Fein, 1983; Messick, 1983; Waters and Sroufe, 1983).

Through measuring children's social competence in a school setting, researchers began to discover disturbing implications of Kindergarten maladjustment. Using peer acceptance as a measure of social adjustment, researchers identified peer rejection as a

most reliable predictor of later psychosocial maladjustment as measured by incidence of juvenile delinquency (Roff, Sells & Golden, 1972), of mental health referrals (Cowen, Pederson, Babigian, Izzo & Trost, 1973) and of dropping out of school (Ullman, 1957). Further, children establish attitudes and reputations during Kindergarten that follow them through many years of schooling (Ladd & Price, 1987). Ladd and Price (1987) found that aggressive behavior and negative peer contact led to peer rejection and were concurrently and predictively related to teacher's perceptions of students as maladjusted.

Children who experience maladjustment in Kindergarten need to be identified and assisted in the adjustment process. The advantage of early identification is that these children can be provided with supports to foster their adjustment and that information about effective interventions can be learned and used with other children. In acknowledging the implications of Kindergarten maladjustment on school success, researchers and educators are called upon to explore the factors influencing adjustment and to ensure that each child is supported in his or her efforts to adjust to the school environment.

Effects of Day Care

During the late sixties and early seventies, most research related to preschool activities explored the effects of separation between mother and child on the child's mental health. Belsky (1984) reported that negative effects were expected as a result of separation and that studies were set up specifically to determine the causes of these effects. It was not until the late seventies that day care research experienced a major refocussing. Much of this change in direction can be attributed to the efforts of Belsky and Steinberg (1978) and their review of day care research at that time. Belsky and Steinberg, in reporting the findings of their review, found that the research supported that high-quality, center-based day care had no negative effects on the mother-child bond.

From these findings, subsequent research began to explore day care's effects on children's cognitive, physical and social-emotional development. The results of these studies were varied.

Some of the studies (Gold & Andre, 1987; Ladd & Price, 1987; Shwarz, Strickland & Krolick, 1972) suggested that the effects of day care experience on children were positive. Ladd and Price (1987) conducted a study on fifty-eight children by measuring adjustment in preschool, early Kindergarten and late Kindergarten. They investigated the preschool to school transition and were interested in factors which predicted children's adjustment to the school setting. Ladd and Price found that children with greater day care experience demonstrated less anxiety as a result of the transition to Kindergarten and that those who attended day care were better adjusted than children who had not attended. These findings were supported by those of Gold and Andre (1978). Gold and Andre studied 110 nursery school children to see whether maternal employment had an effect on Kindergarten adjustment. They found that there was significant differences between children whose mothers were employed and those whose mothers were not employed. Children whose mothers were employed demonstrated better adjustment on nine out of eleven measurement items. Gold and Andre concluded that these effects may have been a result of the children with employed mothers being adapted to nonparental care prior to Kindergarten. Another study with similar findings was that of Shwarz, Strickland and Krolick (1972). Shwarz et al. matched twenty children who had started day care as infants with twenty children who began day care at age three or four. When they measured adjustment at the first and fifth week of nursery school, Shwarz et al. found that the children who had attended infant day care demonstrated less tension, showed more positive affect and had higher social interaction scores. Although the scores of both groups increased during the measurement period, the differences between those children with infant care and those without remained

significant. These three studies (Gold & Andre, 1978; Ladd and Price, 1987; Shwarz, Strickland & Krolick, 1972) support the positive effects of day care.

Other studies (Finklestien, Dent, Gallagher & Ramey, 1978; Ramey et al., 1981; Shwarz, Strickland & Krolick, 1974) found that the day care experiences had negative effects on children. In a later study, Shwarz, Strickland and Krolick (1974) failed to replicate their 1972 findings when they conducted similar research. Shwarz et al. (1974) studied nineteen children who had entered day care as infants and matched them with nineteen children who had no day care expedience. When behavior was measured at ages three and four, children who attended day care were found to be more aggressive, more active and less co-operative with adults. These findings were supported by Finklestien et al. (1982). Finklestein et al. found that, while children who attended day care demonstrated no significant problems in social development in day care, significant differences were found in aggressiveness and hostility between the day care group and a control group when measured at Kindergarten entry. Ramey, MacPhee and Baker-Ward (1981) also found that their research findings identified children who had attended day care since infancy as more hostile than their home-reared peers, as measures by their teachers in early Kindergarten. Thus, the main negative effects of day care as identified in these studies were aggression and hostility.

In her review of day care effects, Clarke-Stewart (1982) identified both positive and negative effects as a result of day care experience. Clarke-Stewart reported that children with day care experience were found to be more helpful, more outgoing and more co-operative. They were found to have more complex, reciprocal and mature interactions and to be less timid and fearful. Their social skills were superior to agemates with no day care experience. Upon starting school, children who attended day care were better adjusted, more persistent at tasks, and more likely to be leaders. However, the negative effects of day care experience were also discussed. Clarke-Stewart found children with day care experience to be more loud and boisterous, more

competitive and aggressive. They were less polite, less agreeable to adult requests, and less respectful of others' rights. These effects, both positive and negative, were found to carry over the first few years of school.

Other studies (Heist, 1981; Matlock & Green, 1989; Moskowitz et al., 1977; O'Connell, 1983) challenged the findings that day care promotes these negative behaviors in children. Heist (1981) reviewed seven studies about the effects of day care. One of the findings consistently reported across the studies was lack of aggression and negative behaviors in center day care and family day care settings (O'Connell, 1983). Matlock and Green (1989) conducted a study comparing 45 four year old children- 18 who had attended day care and 27 who had not. Matlock and Green found no significant differences between children who had attended day care and those who were home-reared. Neither group was found to be more aggressive than the other or to be more socially competent than the other. Moskowitz, Shwarz and Corsini (1977) found that while day care experience may lead to some behavioral changes, there was no particular tendency toward an increase or decrease in maladjustment or psychosocial disorders.

Thus, the research about the effects of day care presents findings that day care experience promotes positive behavior, promotes negative behavior, promotes positive and negative behavior and does not promote negative behavior. With such conflicting findings, it became apparent that the transition from conducting research on parent-child separation to studying the effects of day care had identified some major limitations and qualifying features of the research. Belsky and Steinberg (1978) identified major limitations in the way day care research was being conducted and called upon social scientists to make the appropriate methodology changes. Belsky and Steinberg suggested that the artificial laboratory setting was not the best place to conduct observational and behavioral research on children. They also suggested that researchers should give more attention to the long-term effects of day care rather than focussing exclusively of the immediate effects. Belsky and Steinberg challenged

researchers to change their research designs to be more representative of those using day care. Researchers of day care to this point were focussing their populations in University-based day cares, which provided care which was not necessarily representative of the standards in other day care settings (Belsky and Steinberg, 1978; Clarke-Stewart, 1982; Zigler and Gorden, 1982). Although research so far had focussed on center-based care, the majority of children in care were, at that time as they are today, in licensed or unlicensed family day care homes (Biemiller, Regan, & Lero, 1987; Pence, 1988). Methodology concerns made the ability to generalize the results of these studies questionable. As a result of Belsky and Steinberg's review, researchers in the early 1980's began to diversify their approach to studying the effects on children in care. Different program types were examined in an effort to determine the best type of care. More emphasis was placed on discovering actual outcomes than on explaining assumed outcomes. Less research focussed on University-based centers, and more family day care homes and community-based centers were studied. The results of these studies varied.

Effects of Type of Preschool Peer Experience

Until 1978, few studies examined the effects of different types of nonparental care settings on children's behavior. One exception was a study conducted by Winnet, Fuchs, Moffet and Nerviano in 1977. Winnet et al. studied 124 children aged three to five and one half years old who had attended a variety of care settings including 35 children in center day care, 15 children in family day care, 43 children in no day care and 31 children in a mixture of family and center day care. They found that each group of children did not differ systematically from the others on social development. The day care centers used in the study were community-based as opposed to University-based. Another exception was a study conducted by Lippman and Grote (1974). Lippman and

Grote studied 198 children aged one to four years old. The children attended family day care, center day care or no day care. These researchers found that the groups did not differ systematically by social and emotional characteristics such as co-operativeness and reaction to stress. In 1978, Golden, Rosenbluth, Grossi, Policare, Freeman and Brownlee presented a longitudinal study of 437 children who attended center day care, family day care, and no day care. At eighteen and 36 months, the children were evaluated on various areas of development. There were no significant differences between the groups at either measurement age in terms of social development ratings. The day care centers used in the study were community-based and publicly subsidized. The family day care homes were licensed. Gunnerson (1978) conducted a similar study and found similar results. Gunnerson studied 101 children who attended center day care, family day care, play groups, no day care and a mixture of settings. Gunnerson also found no significant differences between any of the groups. His findings supported those of Winnet et al. (1977), Lippman and Grote (1974), Golden et al. (1978). Two more studies reflected these findings. The first was that of Howes and Rubinstein (1978). Howes and Rubinstein studied forty toddlers- twenty who attended family day care and twenty who attended center day care. They found no significant differences in peer social behavior and interactions or in social interactions with caregivers. The second study is that of McKinnon, Flaggert and Patterson (1982) who studied the long-term effects of Montessori preschool, other preschool and no preschool. McKinnon et al. found that there were no significant differences between the groups in terms of social development measured at ages five through nine years. These six studies, spanning an eight year period, suggested that the type of preschool care that children experience had no effect on their social development.

Other studies found that type of care did significantly effect children's social behavior. For example, in 1972 Saunders and Keister reported their findings of the effects on infants in center day care and in family day care settings. Twenty-two infants

were studied, twelve who attended family day care homes and ten who attended center day care. The children were measured at three month intervals up to the age of three. Saunders and Keister found that, over the two year measurement period, 50% of the children in family day care homes experienced loss in social development scores. In contrast, a large percentage of the children who attended center day care experienced increases in social development scores. Clarke-Stewart (1979, 1980, 1982) conducted a study of 152 children aged two to four years. The children attended center day cares, family day cares, part-time nursery school, no day care and a mixture of center day care and baby-sitting arrangements. Clarke-Stewart found that the children with no day care experience scored poorest on measures of social competence. Children in family day care homes scored above children with no day care experience, while children within center day care settings scored higher than those in family day care homes. The children in part-time nursery school scored the highest of all groups. Children who attended family day care homes scored lower than all other groups on measures of cooperation and prosocial behavior with adults.

Differences in social behavior was again found in a 1982 study by McCartney, Scarr, Phillips, Grajik, and Shwarz. McCartney et al. studied 156 children aged three to five years. The children had attended family day care, center day care, or baby-sitting arrangements for at least six months. This study found that the children enrolled in center day care as infants were rated as more emotionally maladjusted than children in other groups who entered care as infants or at later ages. No differences in social adjustment was found between family day care and center day care settings. Type of care was again shown to be significant in a study done by Andersson (1989). Andersson studied 119 children who attended center day care and family day care. Children's development and behavior was followed from the first year of life until age nine. This study reported that children in early center day care were rated more favorably on sociopersonal attributes than children who attended center day care at a later age or

those who attended family day care. It should be noted that this study took place in Sweden.

Thus, the research on the effects of type of preschool peer experience on children's adjustment is very contradictory. While several studies indicate that type of preschool peer experience does not have an impact on social competency, other studies demonstrated that type of preschool peer experience does have great impact. Of those studies demonstrating that type of care is significant, few agree as to which type of care is most beneficial to enhancing prosocial behavior and adjustment.

Effects of Duration of Preschool Peer Experience

As is the case with the effects of type of care, the effects of duration of care are equally controversial. A variety of research supports that longer duration of care increases the positive effects of day care experience. Ladd (1990) conducted a study concerned with determining the predictors of children's early school adjustment. While Ladd found that duration of day care experience did not effect children's early perceptions of school, the duration of preschool care did forecast changes in children's perceptions toward school, that would take place as the school year unfolded. He found that the children with greater day care experience developed more positive attitudes toward school. Andersson's 1989 study took a longitudinal measurement of children's adjustment at the first year of life through nine years of age. Andersson found that children who began day care as infants were rated by teachers as more persistent and independent, more socially confident, less anxious and as having an easier transition from nursery school to Kindergarten. Ladd and Price (1987) studied fifty-three children of mixed socioeconomic backgrounds who were randomly selected from midwestern American day care centers before entry into Kindergarten. Adjustment was measured in preschool, early Kindergarten and late Kindergarten. Ladd and Price found a significant

relationship between the duration of children's care and their adjustment to Kindergarten. Children with greater duration of care were rated as better adjusted by their teacher. Field (1991) conducted a similar study but used both parental and teacher rating scales to measure adjustment. Parents of children with greater day care experience rated their children as having emotional well-being, leadership, popularity, attractiveness, assertiveness and decreased aggression. Teachers agreed that the children with more day care experience rated higher on emotional well-being, attractiveness and assertiveness. Field went on to find that the children with extensive preschool day care experience in high quality care achieved higher grades than their peers and were more frequently placed in programming for gifted learners.

The negative effects of longer duration of care were reflected in several research studies (Raph et al., 1968; Shwarz et al., 1974). Shwarz, Strickland and Krolick (1974) compared children aged three and four years who had attended infant day care and those who had not. They found that children who had more extensive day care experience were rated as less co-operative, more aggressive and less tolerant of frustration. The findings about the detrimental effects of long-term day care are reflected in the views of Raph, Thomas, Chess and Korn (1968). Raph et al. compared two groups of children upon entry into Kindergarten. The first group had over two years of preschool day care experience and the second group had less than one year of preschool care. It was shown that the children with greater day care duration demonstrated more negative interactions with their teachers than those with less preschool experience.

Howes (1990) examined this controversy from a different perspective. Howes measured children adjustment at the end of Kindergarten using teacher and parent rating scales. She found that longer duration of preschool day care experience in high quality care led to better adjustment while longer duration in poor quality preschool day care led

to poorer social adjustment. Criteria for high and low quality care were described in detail including such factors as adult:child ratios and primary caregiver transitions.

Clarke-Stewart (1982) also had a unique perception on duration of care. She found that the issue of peer interaction was a complex one. Clarke-Stewart found that experience with one peer was better than no peer experience and that experience with two peers was better than experience with one. However, she cautioned that at a certain point too much peer experience might become detrimental.

Summary

There are many conflicting views presented within the literature regarding the effects of type and duration of preschool peer experience on adjustment to Kindergarten. Although the research has progressed substantially from the days where parent-child bonding was the major concern, the focus of the research is still on the effects of location of care and type of caregiver. With the exception of one study that considered play groups, all research has focussed on formal care settings such as day care centers, day care homes and nursery schools. Little attention has been paid to the effects of peer interactions in situation where the first concern is not supervision of the child. Further examination of less care-oriented peer contact such as church activities, play groups and sports activities would provide more information about the effects of peer interactions children's adjustment to Kindergarten.

Chapter Two: Methodology

Participants

The classes in the sample were randomly selected from all the Kindergarten classes in the St. Boniface School Division which use English as the language of instruction. There were ten classes meeting this criterion with a total population of 204 students. Each class was given a number and randomly selected using a random numbers table. Of the ten classes, four classes with a total of 68 students were requested to take part in this study. Forty-eight students obtained parental permission to participate, providing a 71% participation rate of those sampled (see Figure 1). The sample represented 23.5% of the total population (see Figure 2).

Figure 1: Sample Participation Rate

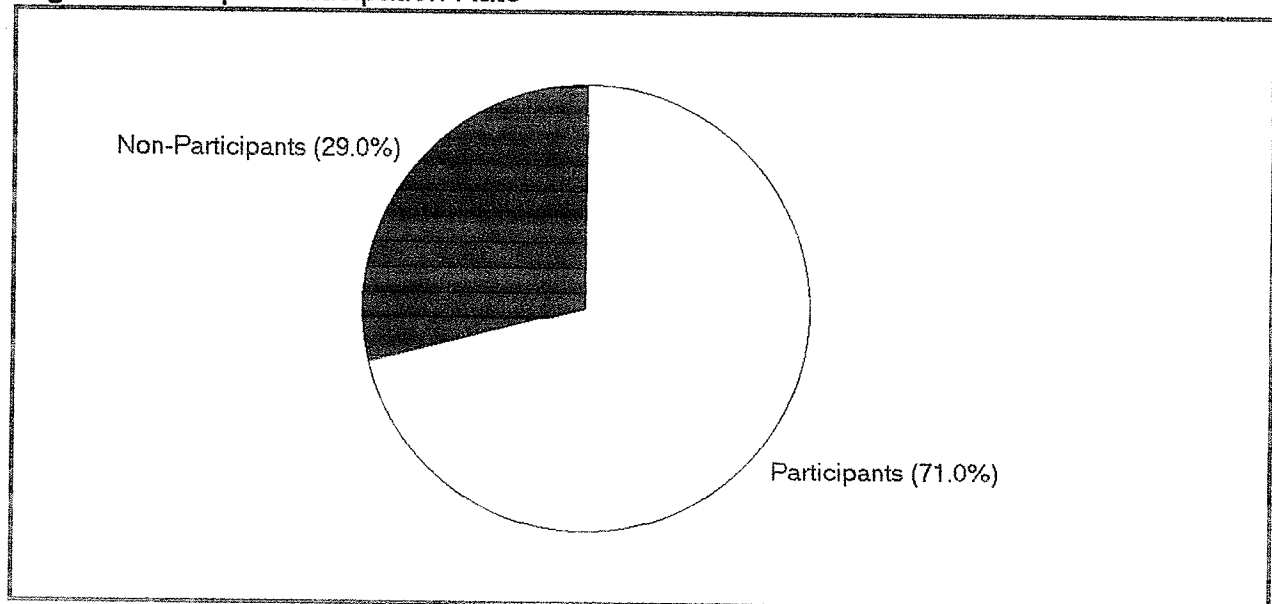
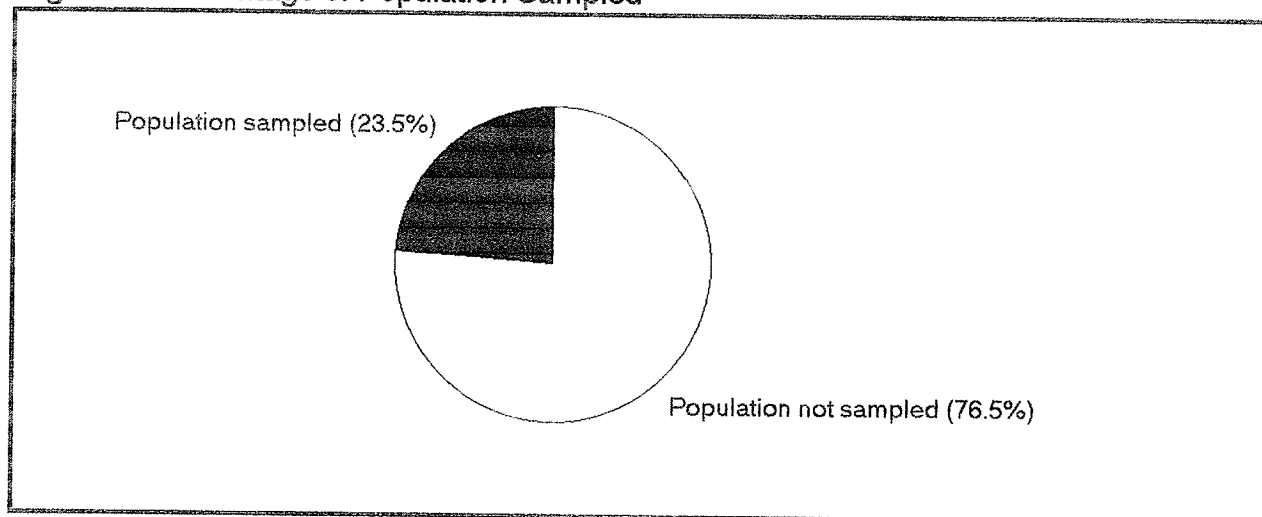


Figure 2: Percentage of Population Sampled



The sampled classes were comprised of students from the two largest Elementary Schools in the St. Boniface School Division- Frontenac School and Shamrock School. Fifteen children participated from Frontenac School and 31 children participated from Shamrock School. The age range of the participants was from 59 to 72 months at the time of teacher evaluation, with the mean age being 65 months. The sample was comprised of 24 females and 22 males. For all the participants, English was the language usually spoken in the home. Thus, the linguistic diversity of the sample was somewhat limited, possibly indicating a lack of cultural diversity. Exploration of cultural factors beyond language spoken in the home was beyond the scope of this study. Average family income of families attending Shamrock School was higher than those of families attending Frontenac School, according to the Director of Finance for the St. Boniface School Division. However, no specific figures regarding this difference were available from the Division, and the most current census information that had been released was eight years outdated.

The three teachers who taught and evaluated the students were all female and had been teaching Kindergarten for at least ten years.

Instruments

There were two instruments used in this study. The first instrument was a parent questionnaire designed specifically for this study (see Appendix A). It meets the criteria for writing effective question established by Babbie (1983). Because this questionnaire had not been used before, the questionnaire was piloted on five parents of Kindergarten children. The five families had children who had attended Kindergarten the previous year or would be attending Kindergarten in the Fall. All lived in the St. Boniface School Division. The questionnaire was found to be satisfactory. The questionnaire consisted of three parts. The first part requested general information about the child such as name, age, gender, birthdate, school and language spoken in the home. The second section listed nine possible categories of preschool experience and parents were requested to indicate activities in which their children took part. By listing the activity types in this way, this section was intended to serve as a reminder to parents of possible activities in which their children may have participated. The categories were day care center, day care home, nursery school, play group, church activities, community club activities, regular care by a baby-sitter or relative, and a category called other, which included all activities not fitting into the categories already mentioned. The third section of the parent questionnaire requested specific information about the activities in which the children took part, as indicated by parents in the second section. Information requested included type of activity, start date, finish date if applicable, number of hours per day and days per week attended, the approximate number of children in attendance with the participant.

The second instrument used was the Child at School Schedule (Kysel et al., 1983). The Child at School Schedule (see Appendix B) was developed in 1983 and is a modified form of the Classroom Observation Procedure Schedule developed by the

London Educational Authority School Psychological Service. The Child at School Schedule (CASS) is now used in England as part of the intake information collected on pupils. The CASS consisted of nine pairs of statements regarding a child's temperament, social behavior at school and approach to learning. Each item is rated by the teacher on a five point scale. The value scoring is reversed on several items to encourage the teachers to read each item carefully, rather than encouraging all scores at one end of the visual rating scale. Reliability of this instrument was reported as follows. Inter-rater reliability and test-retest reliability were reported as .83 and .91 respectively using the Co-efficient of Agreement. Validity is less clearly measured, as CASS is a measure of the teacher's perceptions of student adjustment. However, behavior schedules have been used successfully by Thompson (1975) and Hughes, Pinkerton and Plewis (1979). CASS is similar to the instruments employed in these studies. Additionally, this test fulfills the four criteria of carefully constructed behavior checklist as outlined by Colmar (1988). This test was selected based in its use in previous research about Kindergarten adjustment and because it is clear, concise and easy to administer to large numbers of children.

Procedure

The first step in conducting this project, after randomly selecting the classes to participate, was to meet with the various levels of administration and obtain permission to collect the data. Information meetings were arranged and permission was obtained from the Superintendent of the St. Boniface School Division, the principals of the two schools and the three Kindergarten teachers who took part.

In early October, parents with children in the selected classes were given a package explaining the study. The package consisted of a cover letter explaining the project (see Appendix A), a copy of the instrument used by their child's teacher to

evaluate their child (see Appendix E) and a permission slip to fill out and return by mid October (see Appendix B). On October 15, the teachers provided the parent questionnaire (see Appendix C) to each parent who had returned a parent permission slip. Parents were requested to complete and return the parent questionnaire by the last school day of October. On October 25, a reminder was sent to parents about the deadline for submitting the parent questionnaire. During the first week in November, the teachers evaluated all the participants using the Child at School Schedule. These evaluations, parent permission forms and parent questionnaires were collected from the teacher upon completion and analyzed.

Chapter Three: Results

Analysis of Variance

A one-way analysis of variance (ANOVA) for characteristics of the participants and for type and duration of preschool experience was performed using adjustment scores as the dependant variable. The omnibus F test was selected because it is able to indicate significant differences among any of the variables. If a significant difference is not found, no further analytical comparisons will yield significant differences between any pair of variables compared. If the omnibus F test indicates a significant difference among the variables, the researcher then may conduct further analytical comparisons to determine just where the differences exist (Keppel and Saufley, 1980). There were twenty-three values compared (see Table 1).

The variables were divided in such a way that the comparisons would yield information about the effects of each value of each variable compared with other values of the same variables. For example, the comparisons would indicate whether children who attended day care centers were significantly more adjusted or significantly less adjusted than children who did not attend day care centers. A lack of significant differences was also a potential finding.

The one-way ANOVA indicated a significant difference among the groups formed by classifying the students by the variables of type and duration of preschool experience and by school, age and gender ($F(12, 33) = 2.14, p < .05$), as indicated in Table 2.

Table 1: Values of Variables

VARIABLE	VALUES	n	Description of Values
Age	older	31	64-72 months
	younger	15	59-63 months
Gender	males	21	
	females	25	
Day Care Center	attendees	9	
	non-attendees	37	
Day Care Home	attendees	11	
	non-attendees	35	
Nursery School	attendees	31	
	non-attendees	15	
Play Group	attendees	18	
	non-attendees	28	
Church Activities	attendees	11	
	non-attendees	35	
Sports Activities	attendees	29	
	non-attendees	17	
Sitter or Relative	attendees	15	
	non-attendees	31	
Other	attendees	10	
	non-attendees	36	
Duration	low	25	0-3167 hours
	medium	10	4025-5815 hours
	high	11	6704-10953 hours

Table 2: Anova Summary Table

Analysis of Variance					
Source of Variance	df	Sum of Squares	Mean Squares	F	p.
Type, duration, age, gender, school	12	1024.87	85.41	2.14	0.05
Error	33	1315.13	39.85		
Total	45	2340.00			

Analysis of the Effects of Type of Preschool Experience

Simple comparisons were performed on each variable related to type of preschool peer experience using the Scheffe test. The Scheffe test was selected because it is conservative and controls the Type I experimentwise error rate (Keppel & Saufley, 1980). Each treatment condition related to type of preschool experience was tested.

Table 3: Comparisons of Adjustment Means by Type of Preschool Experience

Activity	Adjustment Means	
	Participants	Nonparticipants.
Day care	16.000	19.730
Family day care home	15.818	20.000
Nursery school	19.194	18.000
Play group	21.222	17.571
Church	19.182	18.943
Sport	18.176	20.235
Sitter	17.267	19.839
Other	18.200	19.222

* No significant differences

Groups compared were center day care experience compared to no center day care experience, family day care home experience compared to no family day care home experience, nursery school compared with no nursery school experience, play group compared to no play group experience, church activities compared to no church activities, regular care by a sitter or relative compared to no regular care by a sitter or relative, and other activities compared with no other preschool peer activities. Using the

Scheffe test, no significant differences were found in adjustment means between any of the groups attending a particular treatment type and those who did not attend that specific treatment type. Although there were some differences in the means, no comparison produced a statistically significant variance ($p=.05$) as indicated in Table 3.

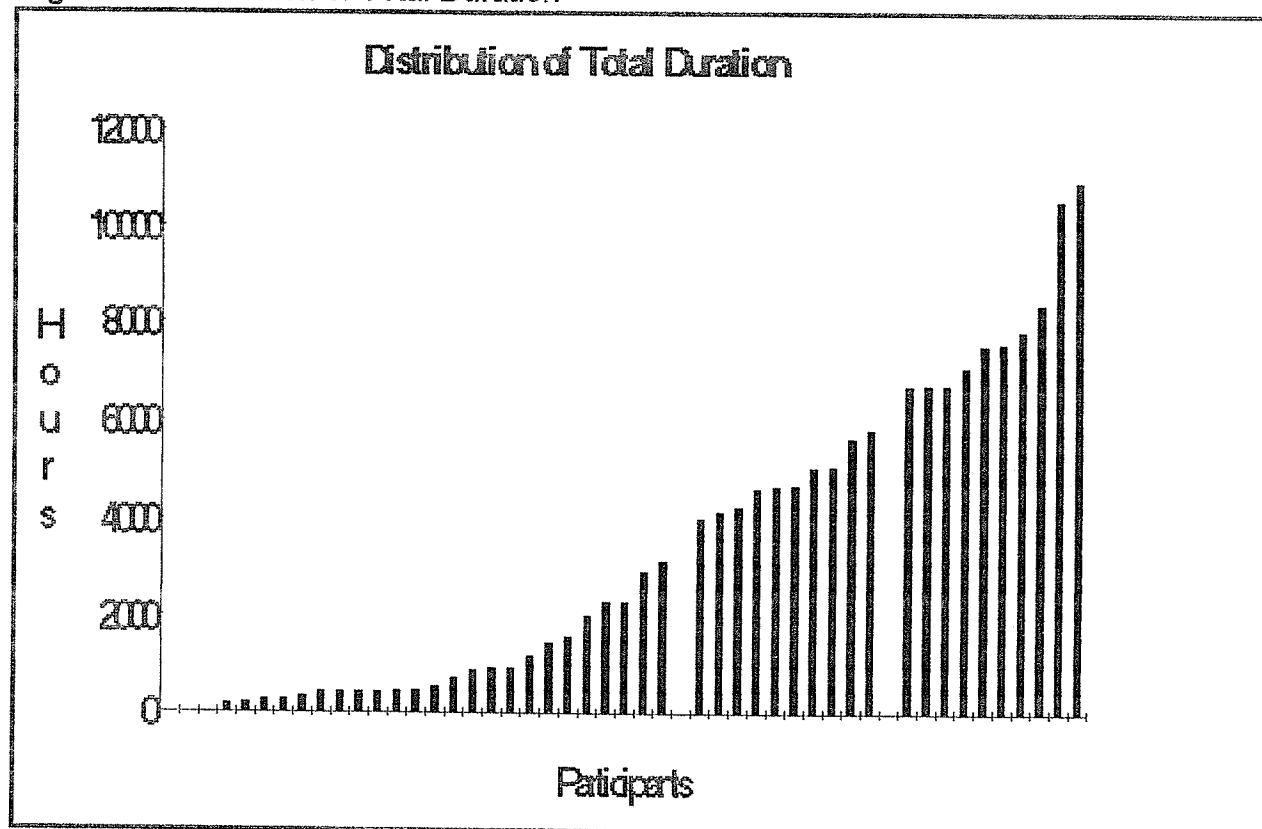
It should be noted that the total possible range of adjustment scores was nine to forty-five, with a score of nine representing positive adjustment and increasing scores representing less adjustment.

Analysis of the Effects of Duration of Preschool Experience

A simple comparison was performed regarding the three levels of duration of preschool peer experience. The participants' durations of preschool peer experience were plotted on a graph and divided into 'low', 'medium' and 'high' duration based on natural divisions apparent on the graph (see Figure 1). The range of total hours of preschool peer experience for the 'low' group was zero to 3167 hours. Total hours for the 'medium' group ranged from 4025 to 5815 hours and 6704 to 10953 hours represented the range for the 'high' group.

The Scheffe test was selected for this comparison because it is conservative and controls for Type I experimentwise error (Keppel & Saufley, 1980). The test results indicated a significant difference in adjustment scores between the groups. The mean for the 'low' duration group was 21.880. The mean for the 'medium' duration group was 15.100. The mean for the 'high' duration group was 16.000. The Scheffe test indicated a significant difference between the 'low' duration group and the 'medium' duration group ($F(12,33) = 3.2849, p=.05$).

Figure 1: Distribution of Total Duration



Additional Analysis

Scheffe comparisons were performed on the descriptive variables of school, gender and age and on the variable of variety of activities. Three of the variables compared indicated no significant differences. There were no significant differences in adjustment scores of children attending Shamrock School and children attending Frontenac School. There were no significant differences found in children in the 'younger' group of children aged 59 to 63 months and the 'older' group of children aged

64 to 72 months in terms of their adjustment to Kindergarten. Variety of activity was represented by three values, 'low' (n=14) represented children who had participated in zero to two activities, 'medium' (n=23) represented children who had participated in three to five activities and 'high' (n=9) represented children who had participated in six or more activities. There were no significant differences in the adjustment scores of children with a 'low', 'medium' or 'high' variety of preschool experiences.

Gender did have a significant effect on the adjustment scores of Kindergarten children ($F(12, 33) = 4.139$, $p = .05$). The teachers rated the females ($\bar{x} = 17.120$) as significantly better adjusted than the males ($\bar{x} = 21.238$) at the Kindergarten level.

Summary of Findings

The variables were compared using a one-way ANOVA and it was determined that a significant difference did exist among the groups compared. Further analytic comparisons using the Scheffe test (see Table 4), indicated that participation in any specific type of preschool experience did not lead to significant differences in adjustment from those of children who did not participate in that specific type of preschool experience. Age, school of attendance and variety of activities also failed to indicate significant differences.

Analytic comparisons using the Scheffe test indicated that significant differences did exist in two of the variables examined. Duration of preschool experience had significant effects of adjustment, with the group with a medium duration being significantly better adjusted than those with low duration. The medium group were also better adjusted than the high duration group, although the difference was not significant. Gender was also related to significant differences in adjustment. Females were found to be significantly better adjusted than males.

Table 4: Results of the Scheffe Comparisons

VARIABLE	VALUES	n	COMPARISON CODE
Age	older	31	A
	younger	15	A
School	Shamrock	31	A
	Frontenac	15	A
Gender	males	21	A
	females	25	B
Day Care Center	attendees	9	A
	non-attendees	37	A
Day Care Home	attendees	11	A
	non-attendees	35	A
Nursery School	attendees	31	A
	non-attendees	15	A
Play Group	attendees	18	A
	non-attendees	28	A
Church Activities	attendees	11	A
	non-attendees	35	A
Sports Activities	attendees	29	A
	non-attendees	17	A
Sitter or Relative	attendees	15	A
	non-attendees	31	A
Other	attendees	10	A
	non-attendees	36	A
Duration	low	25	A
	medium	10	B
	high	11	B

*NOTE: Comparison codes that are different indicate a statistically significant difference ($p=.05$) using the Scheffe test.

Chapter Four: Discussion

The Scheffe test indicated that type of preschool peer experience including center day care, family day care home, nursery school, play group, church activities, sport activities, regular care by a sitter or relative and other activities were not related to significant differences in the children's adjustment scores. These results support the findings of Winnet et al. (1977), Lippman and Grote (1974), Golden et al. (1978), Gunnerson (1978), Howes and Rubinstein (1978) and McKinnon et al. (1982). These results do not support the findings of Saunders and Keister (1972), Clarke-Stewart (1978, 1980, 1982), McCartney et al. (1982) or Andersson (1989). Length of preschool peer experience, however, made a significant difference.

There are a number of possible reasons for these results. A wide range of potential factors may have effected, either alone or in some combination, the results.

Limited Reliability and Validity in the Instruments

Parental recall may have been flawed when filling out the questionnaires. The questionnaire asked parents to provide information about their children's preschool experience that occurred up to 72 months in the past. It is possible that parents omitted some of their child's preschool peer experience or that they included an experience that was not undertaken by their Kindergarten child, but by another of their children.

Second, the Child at School testing instrument may have been unreliable. This rating scale is at best a measurement of the teacher's perceptions of Kindergarten children's adjustment in the first week of November. The scores could have been effected by a variety of factors including children's behavior, teacher's perceptions, and timing. Because all students' adjustment was measured within a one week period, teacher perceptions could have been effected by the children's most recent behavior.

This behavior, because of the Halloween celebrations the previous Friday, may or may not have been representative of the children's usual behavior. Third, the perceptions of the teachers may also have been effected by their own moods or prejudices. The teacher's view of specific children may have been biased by experiences with the children's older siblings, information about the students passed along from the nursery school teacher, or by personality conflicts with these children or their parents. Teachers may also have had some predetermined ideas about the effects of preschool experience, as well as information about individual children's preschool experience from intake meetings with parents. These two factors may have combined and created a self-fulfilling prophecy in terms of the teacher's perceptions of the children's adjustment in Kindergarten.

Real But Unexpected Changes in the Children's Behavior

A possible cause for the lack of significant differences between the groups is that the home environment is more influential to adjustment than is peer preschool experience, as suggested by McKinnon et al. (1982). If this is so, the effects of home environment would certainly be enhanced by generous maternity and parental leaves, and other employment accommodations for parenting such as work-place day cares, flextime and job sharing initiatives. All these factors support the family relationship, therefore enhancing the influence of the home environment on the child. Further studies of the effects of home environment on adjustment using qualitative research methods would provide more insights into this variable.

Another possible cause for the lack of significant differences in children's adjustment as related to type of preschool experience is the potential lack of differences in the preschool experiences available. According to Stewart-Clarke (1982), when asked about the most important outcome for their children when selecting preschool experiences, parents' most frequent response involved the socialization of their children. Howes (1990) suggested that the range of acceptable behavior within a group setting is

somewhat more restrictive than that tolerated by individual parents. That is, children in a group setting must adjust their behavior in order to become part of the group. Thus, the potential for socialization in any preschool activity is present, perhaps diminishing the differences in the effects on children in different activities. The similarities in activity types are further regulated by licensing bodies interested in the care of children. All day care centers and family day care homes with more than four children must be licensed and regulated by the Child Day Care Office. Most nursery schools are regulated by the same organization. Policies and standards related to programming and behavior management are stipulated by the licensing body, greatly influencing consistency in meeting minimum standards and in diminishing differences in the influences of the various types of activities.

Finally, Moskowitz et al. (1977) suggested that any preschool experiences with other children may effect some behaviors, but that few children will have significant effects related to maladjustment.

Findings are suggestive that potentially any and in probability a combination of the above-mentioned factors influenced the finding that type of preschool peer experience had no significant effect on adjustment of Kindergarten children.

Effects of Duration of Preschool Peer Experience

As indicated by the statistical analysis, children with 'medium' duration of preschool peer experience scored significantly better on Kindergarten adjustment than those with 'low' duration of preschool experience. The group with 'high' duration of preschool peer experience scored poorer on Kindergarten adjustment than the 'medium' duration group, but better than the 'low' duration group.

Of all the research reviewed, Stewart-Clarke (1982) is the only social scientist to report this trend of a peak in positive effects and then diminishing returns. Although

other researchers have considered this relationship, most have found that duration of preschool is related to adjustment in a linear way. This non-linear trend suggests many potential causes, mainly related to parental influences and reasons for selection of duration, and attributes of the activities.

Parental Influences

The main influence of duration of preschool peer experience is parents. Parents are responsible for selecting the duration of preschool experience for their children and this choice may be based on a variety of factors.

First, the parents' employment situations may necessitate alternate care arrangements. Duration of this arrangement is influenced by work hours and by the presence or absence of a parenting partnership. All ten of the 'high' duration children spent most of their peer contact hours in a care-oriented setting. Parents who are not working outside the home or who have evening work hours have the opportunity to engage their children in other types of preschool experiences with shorter durations, where child care is not the first consideration. Children of working and single parents may also begin their care arrangements earlier than children with at least one parent at home.

Another factor which influences adjustment is parental attitudes and skills. The choice of duration of care may be reflective of a parent who is overprotective, or disinterested. Parents who do not encourage peer interactions for their children may not do so because they do not value this type of experience or because they feel that preschool socialization is an adult responsibility. Children who are mainly in the company of adults before beginning Kindergarten may be adult-oriented and unable to interact effectively with children. These children may be shy, fearful or overdependent on their parents. Without having the experience of being a group member, they may have difficulty with sharing, taking turns and waiting.

The third parental influence is a potential for relinquishing the role of primary caregiver to an alternate caregiver. Parents may have little contact time with children who are in care for 'high' durations. This may be a result of parents who are very career oriented, or who need to work for longer periods of time or at multiple jobs in order to provide the necessities. Children who demonstrate behaviors that parents feel they are unable to cope with at home may also be placed in 'high' durations of care in order that their parents be rid of them. Children who are socialized mainly in a group setting are influenced by both the other children and by the caregivers. The quality of the program as well as the consistency and quality of bonding with the caregiver would have a great impact on children who spend most of their time in these settings.

Attributes of the Preschool Experiences

Children who attend different durations of preschool activities do so for a variety of reasons. Each type of activity is characterized by many routines similar to other preschool activities, yet each has some unique attributes. Although the children may have been attending a certain activity for a certain time period, some of this time probably was taken by solitary activities and routines such as napping, dressing and undressing, solitary play and reading. These routines would be more characteristic of care-oriented activities than of other activities such as sport and church activities. Types of preschool experiences which take up relatively little time, such as church activities, sport activities, play groups, are usually not licensed or monitored for the quality of experience they provide to children. Often, there are many children per adult, with the adult being untrained in issues of childhood development and socialization. In care-oriented activities, the licensing body ensures that there is some homogeneity of experience in that standards must be met. If longer durations of preschool experience

are linked to specific types of experiences, there may be an interaction taking place that effects the findings of this study, as well as the children's adjustment in Kindergarten.

Balancing the Influences of Parents and Peers

The 'medium' duration of preschool peer experience group scored significantly better than the 'low' group on measures of adjustment. The potential reasons for this are related to a balance of influences from the home and preschool peer activities. Children with 'medium' duration of peer contact prior to Kindergarten may fall into this category of duration for a variety of reasons. They may be children who have had part-time peer contact care or activities over the years prior to Kindergarten. For these children, a balance of home and preschool peer influences worked together in socializing the children. It is possible that both home and peer activities had a positive effect on socialization, or that deficits in one area were supplemented by positive influences on adjustment by the other area. Also effecting these children would be the opportunity for their parents to select and screen their preschool experiences. Because the choices of activities would be influenced only by the parents' perceptions of the positive qualities of each activity and not by the necessity of finding close, economical, responsible child care arrangements, the potential for selecting the best activities is possible. Another possible scenario which would place these children in the 'medium' duration group is that they had the benefit of primary parental care as infants and were placed in alternate full-time or part-time care arrangement with their peers at a later age. This situation would foster a solid parent-child bond prior to the introduction of peer influences and alternate caregivers. This security would then be reflected later in adjustment to other new situations, such as Kindergarten.

The children with a balance of peer and parental influences are given the benefits of having a secure bond with their parent, who also is a resource and model for

appropriate behavior. They are also given an opportunity to practice their social skills within a setting that cannot be created by adults alone. Thus, these children gain skills in interacting in the culture of childhood with the benefit of adult guidance.

The relationship between duration of preschool peer experience and children's adjustment to Kindergarten is complex because the non-linear trend suggests so many possible causes for the significant differences in adjustment scores. It is difficult to know which factors actually caused the differences in adjustment without knowing the reasons why children experienced the variety of durations of preschool peer experience. It is possible that any, and probable that a combination of several of the possible causes effected the children's adjustment to Kindergarten.

Additional Analysis

Additional analysis was performed on four variables outside the scope of the hypotheses. The reason for this additional analysis was that having more information about the significant variables effecting the participants' adjustment would give more direction for further research and help to make the adjustment factors for this study more meaningful.

Of the four additional variables analyzed, gender analysis yielded the only significant differences, with the females being rated as better adjusted than the males. These findings are supported by Davies and Brember (1989), Andersson (1989), Ladd (1990) and Matlock and Green (1989). There are several possible reasons that the teachers perceived the males as less adjusted than the females. First, observations of children's play have shown that boys tend to choose and interact with equipment that encourages repetitive and stylized use, such as riding toys and climbing equipment. The repetitive nature of this equipment leads to the children to quickly tire of one piece of equipment and to move on to the next. Teachers may perceive these children, usually

boys, as overly active and as being easily distractible (Whyte, 1983). Another cause of teacher's perceptions related to equipment selection is the contrast between the equipment chosen by girls and that chosen by boys. Girls tend to choose quieter activities such as crafts, domestic play and small group activities. Boys tend to choose play with construction toys, vigorous physical activities and rough and tumble play (Morgan and Dunn, 1988). As well, boys tend to spend shorter time periods with many peers while girls spend longer time periods with a limited number of peers (Matlock and Green, 1989). Observational methods such as time sampling might lead teachers to evaluate the girls as better adjusted and as having better peer relations than the boys. In terms of aggression, many Kindergarten females have more highly developed language skills than Kindergarten males (Ladd, 1990). Whereas the girls may have the ability to negotiate and verbally solve conflict situations, the boys may be more prone to physical expression of their anger or frustration. This too may effect the teacher's perceptions of the children's adjustment. Finally, the teachers of the Kindergarten classes are responsible for a large number of children at one time. It is possible that in the interests of organization, they have come to value quiet conformity as a measure of positive adjustment.

In order to diminish the perceived differences in children's adjustment by gender groupings, teachers might reexamine their own values within the classroom and the reasons for valuing these attributes. Differences might be made less apparent if children were encouraged to play in types of activities that are not stereotyped to only one gender. Integrating areas such as the house area and the climber or the block area and miniature figures may aid in gender integrated play. Themes emerging from this play might be influenced by a collaboration of the players. Another suggestion is that boys might be encouraged to channel their aggression into appropriate activities, therefore promoting co-operative play.

Another variable examined as additional analysis was school of attendance. This variable was analyzed for several reasons. First, the socio-economic status of those families whose children attended Shamrock School was higher than those who attended Frontenac School, according to the Director of Finance for the St. Boniface School Division. It was possible that this difference would be related to a difference in opportunity for preschool peer experiences because of financial restrictions. This variable, however, did not prove to be significant in this investigation. It is possible that although the socio-economic status was different between families attending the two schools, the socio-economic status was not significantly different between the two samples. This is purely speculative, however, as income levels were not obtained from families in this study. Another reason that this variable was investigated was to determine whether the teachers or students from school to school were significantly different. This is unlikely, however, for several reasons. The schools studied are in close proximity and staff from one school has transferred to the other. This would tend to increase the similarities between teaching philosophies between the schools. As well, the principal of Shamrock School was the principal of Frontenac School for ten years before moving to Shamrock School. All these factors support that the lack of significant differences in adjustment scores between the schools are reflective of a lack of overall significant differences in the staffing and students at the two schools.

The third additional analysis involved comparisons of the variety of preschool experiences had by the children. This variable was examined to determine whether children who were better adjusted in Kindergarten were most experienced with adapting to new peer situations as suggested by Ladd (1990). This investigation did not support Ladd's findings and no significant differences were found between children with 'high', 'medium' or 'low' variety of activities. A possible reason for this is that the activities in which the children participated were more similar than different, thus adaptation to the new Kindergarten environment was more dependant on the duration of preschool

experience than the variety. By exploring this variable, it became clear that the children with the most preschool peer experience in terms of duration were not the children with the greatest variety of experiences. This leads to the conclusion that children may be spending longer time periods in a limited number of activities instead of participating in many short-term activities.

The final variable explored was age. The findings that age of Kindergarten children had no effect on their adjustment is not supported by the majority of research on young children. Most studies (Clark, 1989; Davies & Brember, 1989; Meadows, 1986), have found that children prosocial behavior develops as a function of age and ability. As children gain the ability to recognize and control emotions and to understand and take part with others, they become more socialized within the peer environment. Possible reasons for this trend being shown as nonsignificant in this study are varied. First, the age range of children studied may have been too small to determine any trends or differences in the children's social development. Second, the teachers were aware of the children's ranking in the class in terms of age and may have accommodated for this difference by adjusting their expectations. Third, the duration of preschool peer experience, which is independent of age, may have had greater impact on children's adjustment than did their chronological age. Fourth, the sample size may have been too small to be able to determine significant differences in adjustment by age ($p = <.05$).

Chapter Five: Conclusions

Statistical analysis based on the data collected for this study support the first hypothesis that the type of children's preschool experience does not influence their adjustment to Kindergarten. Findings did not support the second hypothesis that duration of children's preschool peer experience does not influence their adjustment to Kindergarten. On the contrary, this study found that duration of preschool peer experience did influence adjustment to Kindergarten. Further, although this project found that age, school and variety of preschool peer experience were not significant, gender was found to significantly influence children's adjustment to Kindergarten.

Although these findings contribute to understanding some of the factors which effect children's adjustment, more research is needed if the risks of maladjustment are to be avoided. Four suggestions for further research in this area are as follows. First, longitudinal studies which monitor the quality of children's preschool experience and follow their adjustment patterns during school would provide a better understanding of the attributes present in preschool programs which would foster the best adjustment to school. Second, use of a larger sample would allow more complex analysis and allow researchers to test for variable interactions. Third, qualitative research regarding the reasons for selecting certain types and durations of preschool peer experience would provide insights into the reasons for their effects on adjustment. The present study was limited in its exploration of cultural influences, the impact of socio-economic status and of parenting styles. A qualitative component would help to clarify the speculation regarding the choices made by parents for their children's preschool peer experience. Fourth, qualitative research would provide information about how teacher's attitudes about gender characteristics effects their perceptions of children's adjustment to Kindergarten.

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Appendix A

Dear Parent or Guardian,

I am studying the relationship between children's preschool experiences with other children and their adjustment to Kindergarten. This study is a thesis project and is being conducted as part of my master's degree program in Education at the University of Manitoba.

Several Kindergarten classes have been selected to take part in this study. Your child and his/her classmates were chosen. This study has been approved by the University of Manitoba Ethics Committee and by the St. Boniface School Division superintendent.

If you agree to have your child participate in the study, I will ask you to fill out a short questionnaire regarding your child's preschool experiences with other children. The questionnaire will take five to twenty minutes to complete, depending on the number of activities he/she attended. You will be provided with an envelope in which to return the completed questionnaire. Information about your child will not be shared with teachers, principals or other parents.

Once you have filled out the parent questionnaire and returned to your child's teacher, your child's teacher will fill out a short checklist regarding your child's adjustment to Kindergarten. I have attached a copy of the checklist that the teacher will use. The results of the checklist will be held in confidence and will be used as data for this study. Information about your child's adjustment will be made available only to myself. Your child will not be identified anywhere in the findings of the study. All data will be destroyed upon completion of the study.

Participation in this project is totally voluntary and you may withdraw at any time without penalty. A short summary of the findings will be given to all those who participate. If you would like to participate, please fill out the parental consent form and return it to your child's teacher by October 15. You may keep the check list as a reference.

If you have any questions about this letter or at any time during the study, I can be reached at [redacted]. Translators can be arranged if needed. I will be very happy to help in any way necessary.

Thank you for your help with my project. *I appreciate your time and interest.*

Sincerely,

Laura Sokal

Appendix B

I _____ give my permission for my child _____ to participate in Laura Sokal's research project. I have read and understand the attached information about the study.

Signed _____

Relationship to child _____

Dated _____

Appendix C

PART A: DESCRIPTION OF CHILD

Child's name _____ Child's sex: (check one) male _____
female _____

School:(check one): Shamrock School _____ Child's Birthdate _____
Frontenac School _____ month year

Language usually spoken in the home:(check one) English _____
Other _____

PART B: LISTING ACTIVITIES

Please provide information about your child's experience with other children before kindergarten. Accuracy in dates is important. If you are unsure about a date, please check with others involved in the same activity. If you are unsure whether or not to include an activity, please include it.

Please check the activities your child attended:

- ___ day care center
- ___ day care home
- ___ nursery school
- ___ play groups
- ___ church programs
- ___ sport programs
- ___ community club programs
- ___ regular care by a relative/babysitter
- ___ others

PART C: DESCRIPTION OF ACTIVITIES

Please describe each of the activities checked off:

Type of activity _____

Date started: _____
month year

Date finished: _____ or still attending _____
month year

Number of days each week: (check one) 1___ 2___ 3___ 4___ 5___ 6___ 7___

Hours attended each day: (check one)

less than one___ 1 to 4___ 4 to 8___ more than 8___

Approximately how many other children attended with your child? (check one)

up to three___ 4 to 10___ more than 10___

Type of activity _____

Date started: _____
 month year

Date finished: _____ or still attending _____
 month year

Number of days each week: (check one) 1__ 2__ 3__ 4__ 5__ 6__ 7__

Hours attended each day: (check one)

less than one__ 1 to 4__ 4 to 8__ more than 8__

Approximately how many other children attended with your child? (check one)

up to three__ 4 to 10__ more than 10__

Type of activity _____

Date started: _____
 month year

Date finished: _____ or still attending _____
 month year

Number of days each week: (check one) 1__ 2__ 3__ 4__ 5__ 6__ 7__

Hours attended each day: (check one)

less than one__ 1 to 4__ 4 to 8__ more than 8__

Approximately how many other children attended with your child? (check one)

up to three__ 4 to 10__ more than 10__

Type of activity _____

Date started: _____
 month year

Date finished: _____ or still attending _____
 month year

Number of days each week: (check one) 1__ 2__ 3__ 4__ 5__ 6__ 7__

Hours attended each day: (check one)

less than one__ 1 to 4__ 4 to 8__ more than 8__

Approximately how many other children attended with your child? (check one)

up to three__ 4 to 10__ more than 10__

Type of activity _____

Date started: _____
month year

Date finished: _____ or still attending _____
month year

Number of days each week: (check one) 1__ 2__ 3__ 4__ 5__ 6__ 7__

Hours attended each day: (check one)
less than one__ 1 to 4__ 4 to 8__ more than 8__

Approximately how many other children attended with your child? (check one)
up to three__ 4 to 10__ more than 10__

Type of activity _____

Date started: _____
month year

Date finished: _____ or still attending _____
month year

Number of days each week: (check one) 1__ 2__ 3__ 4__ 5__ 6__ 7__

Hours attended each day: (check one)
less than one__ 1 to 4__ 4 to 8__ more than 8__

Approximately how many other children attended with your child? (check one)
up to three__ 4 to 10__ more than 10__

Thank you so much for your help. My thesis project would not be possible without your help. Please feel free to use the back of this page to describe additional experiences using the same format.

PLEASE RETURN QUESTIONNAIRE TO YOUR CHILD'S TEACHER BY OCTOBER
29. THANK YOU.

Appendix D

Dear Teachers,

Firstly, I would like to thank you for your gift of time and energy in allowing this project to take place in your classrooms. I feel that the results will be helpful to those providing Kindergarten to children as well as to parents who are making preschool programming choices for their children.

The format of the project is as follows:

1. **SEPTEMBER:** A meeting will take place between the teachers and myself to introduce the design and instrumentation. Copies of all necessary forms will be prepared and delivered to the teachers before the end of the month.
2. **OCTOBER 1:** Teachers distribute parent information letter, a copy of the teacher checklist and the parental consent form. These will be stapled together when they are delivered to you. Consent should be returned by October 15.
3. **OCTOBER 15:** Teachers distribute the parent questionnaire to parents who have returned the consent form. An envelope will be provided for the return of the questionnaires and they should be returned by October 29.
4. **FIRST WEEK IN NOVEMBER:** Teachers complete the adjustment checklist on all the children who have parental consent forms. These should be completed even if the questionnaire has not been returned. It is important that all the checklists be completed during this week so that all the students in the study are being evaluated at the same point in time.
5. **SECOND WEEK IN NOVEMBER:** I will pick up the consent forms, parent questionnaires and teacher checklists.
6. **SPRING OR SUMMER 1994:** A summary of the findings will be available to all those who took part in the study.

I can be reached at [redacted]. Please feel free to call me with any questions or concerns and to direct any questions from the parents to me. Thank you again for your co-operation.

Sincerely,

Laura Sokal

Appendix E

Child at School Schedule

This observation schedule consists of pairs of statements. Each pair covers a particular aspect of the child's temperament and disposition, learning skills or social behavior.

It is important, before filling out the schedule, to read ALL the statements carefully. It is however, also necessary, when rating a child's behavior, to consider each pair of statements SEPARATELY AND INDEPENDENTLY of all others.

Judgements should be made on the basis of your personal knowledge and experience of children of this age - not just in context of this particular class. You should also attempt to base judgements on your own knowledge of the child, not what other teachers say.

For each pair of statements:

- Circle 1 if statement A is true of the child all or most of the time.
 Circle 2 if statement A is usually true of the child.
 Circle 3 if the child's behavior can best be described as falling exactly between the two statements, or if he/she is sometimes one and sometimes the other.
 Circle 4 if statement B is usually true of the child.
 Circle 5 if statement B is true of the child all or most of the time.

Statement A	1	2	3	4	5	Statement B
A happy and content child	1	2	3	4	5	An unhappy, anxious or worried child
Has difficulties in coping with new situations or people	1	2	3	4	5	Copes easily with new situations or people
Even-tempered, easy going child	1	2	3	4	5	Irritable or quarrelsome
Cannot concentrate on any particular task. Easily distracted.	1	2	3	4	5	Can concentrate on any task. Not easily distracted.
Eager to learn; curious and inquiring child	1	2	3	4	5	Shows little interest, curiosity or motivation in learning.
Perseveres in the face of difficult or challenging work	1	2	3	4	5	Lacks perseverance. Is impatient with difficult work.
Helpful and considerate towards other children.	1	2	3	4	5	Bullies or is spiteful towards other children.
Solitary, withdrawn child	1	2	3	4	5	A sociable, friendly child.
Readily accepts limits, discipline and control	1	2	3	4	5	Is generally disruptive uncooperative, or disobedient.

