

## DOCUMENT RESUME

ED 126 873

IR 003 780

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TITLE The Sesame Street Generation: The Year After. An Interim Report.  
INSTITUTION Children's Television Workshop, New York, N.Y.  
PUB DATE [71]  
NOTE 30p.; For related document see ED 047 823; Not available in hard copy due to marginal legibility of original document; Table five not included  
EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.  
DESCRIPTORS Disadvantaged Youth; Early Childhood Education; Educational Television; Predictor Variables; Primary Grades; \*Program Evaluation; Programing (Broadcast); \*Readiness; Readiness (Mental); \*Television Research; \*Television Viewing; Viewing Time  
IDENTIFIERS Childrens Television Workshop; \*Sesame Street

## ABSTRACT

The first year evaluation of "Sesame Street" reported that children learned more of what the program taught if they watched more frequently (see ED 047 823). This follow-up study in the second year of the program concentrated on disadvantaged children. It showed that children who viewed the program most frequently were younger and more able than children who viewed the program very little, and children who viewed very little came from lower socioeconomic groups. When they entered school, children studied in the "Sesame Street" evaluation were assessed by their first grade teachers and ranked according to general readiness for school, verbal ability, intelligence, coordination, attitude toward school, and relations with peers. In all cases, the children who viewed "Sesame Street" most frequently were ranked higher than average by their teachers.  
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ED12 6873

The Sesame Street Generation:

The Year After.

An Interim Report

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## Preface

Following the initial and instantaneous success of Sesame Street in its first year of telecast, parents and educators began to ponder the question of the long-term effects on regular viewers. In the short run, both subjective anecdote and carefully documented objective report attested to the value of the show. But even among those who were the keenest admirers of Sesame Street a question bothered them. Specifically, the question was asked, "What will become of the first generation of Sesame Street watchers when they enter school?" Would children who had been regular viewers be turned off by the classroom which, in general, would hardly be expected to compete with Sesame Street in its attention-getting devices.

The evaluators, too, wondered would the gains observed among regular viewers of the show give them an advantage over their non-viewing peers with respect to readiness for school? Or would they be quickly bored by early classroom experiences geared to their less knowledgeable peers. Would the gains obtained during the first season of Sesame Street persist through the summer into the school year? And would preschoolers, whose appetites for cognitive challenge had been whetted by Sesame Street, find kindergarten a distinct let-down?

What follows is an interim report on selected members of the first-year Sesame Street sample -- those who were at-home children from disadvantaged neighborhoods and who went on to school in September 1970. Some background from the first year is given in order to set the stage of this interim report. For full details,

the reader is referred to the first year report.\*

\* Ball, S. and Bogatz, G. The First Year of Sesame Street: An Evaluation. Educational Testing Service, October, 1970.

## Introduction: The First Year Evaluation

In 1968, when Children's Television Workshop began to develop Sesame Street, ETS was given the assignment of assessing and evaluating the impact of the show on its intended audience, 3- through 5-year old children. The evaluation conducted by ETS during the first year that the show was telecast (1969-70) attempted to answer several broad questions: First, did preschool viewers of the show learn more of the things Sesame Street was trying to teach than comparable children who did not watch the show? Second, what characteristics differentiated the viewers who learned most from the show from the viewers who learned least and, as a corollary to that, what learning effects could be observed among various sub-categories of children who watched the show? Finally, what elements of the TV program were most effective in terms of learning?

All of the questions related to learning were formulated in terms of the goals articulated by Children's Television Workshop. Specific measures were developed by ETS to assess progress in the goal areas. Instruments were developed as well to measure the viewing behavior of the children who watched the show, to describe the home background of the subjects, to monitor the daily coverage of the goal areas in actual broadcasts, and to elicit the opinions and attitudes of parents and teachers whose children took part in the evaluation. The Sesame Street test battery was administered to all subjects before the start of the viewing season in the Fall of 1969. At the same time, the Peabody Picture Vocabulary Test was administered in order to assess the level of vocabulary of the subjects and to provide some means by which to compare them to a national sample.

The Sesame Street battery (this time without the PPVT) was administered again at the end of the viewing season (in late Spring 1970). Parent questionnaires were administered pre- and post-viewing season as well. In the interim, viewing records were kept, children were observed on a scheduled basis watching the show, and ETS staff monitored the daily broadcasts in order to perform a content analysis of the educational and entertainment components of Sesame Street. Teachers were also given the opportunity to contribute their reactions to the show itself and to their children's responses to it.

Children were studied in one of two settings - in their homes or in preschool classrooms - and over five geographical areas: Philadelphia, Pennsylvania; Durham, North Carolina; Phoenix, Arizona; Boston, Massachusetts; and a rural region of California. Some children were encouraged to watch the show; others were not. The study included groups of 3-year-olds, 4-year-olds, and 5-year-olds, of middle and low socio-economic status. Finally, a group of Spanish-speaking children (all 4-year-olds) was included. Originally, a sample of 1200 children was selected. In all, a total of 943 children for whom pretest and posttest data were available was included in the final analysis, after attrition, and the rejection of records for unreliability. The sampling procedures and other subcategories of subjects included in the study are described in detail in the first years' report (Ball and Bogatz, 1970), and will not be included here.

Sesame Street proved such an instantaneous success that few children in the sample were truly non-viewers. In the absence of a control group in the strict sense, the 913 subjects were divided into quartiles according to how much they had watched Sesame Street during that first broadcast year. Assignment to one or another of the viewing quartiles was based on a composite viewing score. Q1 children watched the show rarely or never, Q2 children watched about 2 or 3 times a week, Q3 children about 4 or 5 times a week, and Q4 children watched an average of more than 5 times a week. All subsequent analyses were based on viewing quartiles.

The one major finding that cut across all subcategories of children included in the first year's evaluation was that learning was directly and positively related to amount of viewing. Stated simply, the more children watched, the more they learned of what the show was teaching. Once again, the reader is referred to the first year evaluation report for more detailed consideration of this major finding. Suffice it to say here that the greatest gains from pre-test to posttest were made by children in Q4.

There were 731 children who were considered "disadvantaged" among the first year sample. These children were scattered across the four viewing quartiles and, for them as well as for the total sample, learning was related to viewing. Of the 731 disadvantaged, 389 were "at-home"; that is, they were not attending Head Start or any other regular preschool program during the year of the study. They were observed as they watched Sesame Street and tested in their homes, in contrast to the "at school" group, who were observed watching Sesame Street and tested in classrooms.

Since disadvantaged children, and particularly disadvantaged children who have not had the opportunity to take part in preschool programs, have always been of most interest to CTW, it was decided to isolate the first year's at-home disadvantaged group for follow-up into a second year.

On the whole, the at-home disadvantaged group watched the show less than did the total sample (212 children were in Q's 1 and 2 compared with 177 in Q's 3 and 4); still, the heaviest viewers gained the most. At the start of the first year (at the time of pretest), the children in Q's 2, 3, and 4 are similar in terms of test scores. By the end of the first viewing year, substantial differences exist among the groups. In the tests that were most specific to the goals of the show, (letters, numbers, forms, etc.), Q4 children gained the most. For more detailed graphic and descriptive material concerning the at-home disadvantaged population, the reader is once again referred to the first-year evaluation report.



### Follow-up: Second Year Subjects, Sites, and Measures

As indicated previously, it was decided to concentrate follow-up investigations on the children who were the at-home disadvantaged group of the first year evaluation. The first year's disadvantaged children came from three sites: Boston, Durham, and Phoenix. Local coordinators had established workable data-gathering operations in all three sites; and the procedures for recruiting and training testers, distributing and collecting test materials, and maintaining subject cooperation were firmly entrenched. Data collection would take much the same form: pretesting before the start of the viewing season, posttesting at the end, pre- and post-test parent questionnaires, viewing records, and finally, to serve a major follow-up interest in school behavior of the first-year children, a rating of these children to be performed by their teachers.

Of the 389 at-home disadvantaged children, 302 were pretested at the start of the second year of Sesame Street (Fall, 1970). Of these, about 160 went on to school. Finally, of those who went on to school, there were 112 for whom teacher ratings were obtained. It is on this group of 112 that the remainder of this report is focussed.

For the follow-up children as for the original sample, analyses of data are based upon the division of the total group into viewing quartiles. In the second year, viewing scores were a composite arrived at by means of responses to questions on the parent questionnaire and viewing records. Both the Year I posttest parent questionnaires and the Year II pretest parent questionnaires were used, so there is some recognition given the degree to which the

children continued to view Sesame Street during the summer between Year I and Year II. Between Year I and Year II, the Sesame Street test battery was revised to correspond to new goals that had been developed for the second year of Sesame Street. As a result, test scores reported here reflect only those items that are common to the Year I and Year II batteries. Once again, the tests are described fully in the first year report and will not be gone into again here. Test results for all of the second-year children are presented in Table 1. The results represent only the items that were common to the Year I pre- and posttests and the Year II pretest and are presented according to viewing quartiles. Table 2 presents the pretest means and gains on selected subtests from the Year II battery. Table 3 gives scores for selected items from the parent questionnaires of follow-through subjects. Included are those items which, in the first year study, showed some degree of difference according to the viewing behavior of the children.

It can be seen from the assorted scores that the Q4 (high-viewing) children are a younger, abler group than the total, and that the Q1 children (those who viewed very little, if at all) are by all standards a more disadvantaged group than the rest. The socioeconomic status of the lowest-viewing group is by far the lowest of the four quartiles, and the parent and child affluence and educational uses scores are similarly depressed (see the first year summary report for explanations of these scores). The Q1 Q2 children are also lower in mental age as measured by the PPVT and by the time of the posttest, Year I, children in all viewing quartiles show gains over the majority of the tests. More-

TABLE 1  
FOLLOW-THROUGH SUBJECTS:  
COMMON ITEM SUBSCORES

N's

Q1 = 30

Q3 = 24

Q2 = 28

Q4 = 30

Total 112

		YEAR I PRETEST		YEAR I POSTTEST		YEAR II PRETEST	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Body Parts (18 items)	Q 1	10.7	4.5	15.1	2.8	15.5	2.3
	Q 2	11.6	4.4	14.9	3.1	15.4	2.5
	Q 3	12.3	4.3	14.4	4.3	16.0	2.4
	Q 4	13.4	3.5	17.0	1.4	16.4	1.4
	Total	12.0	4.3	15.4	3.2	15.8	2.2
rms (8 items)	Q 1	2.5	1.5	4.1	2.3	5.7	1.7
	Q 2	3.0	1.8	4.7	1.9	5.4	1.9
	Q 3	3.3	1.9	4.9	2.2	6.3	1.9
	Q 4	3.5	2.2	6.6	1.8	6.9	1.8
	Total	3.1	1.9	5.1	2.3	6.1	1.9
Matching Letters (5 items)	Q 1	3.7	1.2	4.1	1.2	4.4	0.8
	Q 2	3.6	1.0	4.2	0.7	4.2	0.8
	Q 3	3.9	1.0	4.5	0.8	4.5	0.6
	Q 4	4.1	1.1	4.7	0.5	4.6	0.5
	Total	3.8	1.1	4.4	0.9	4.4	0.7
Naming Letters (9 items)	Q 1	1.1	0.7	1.9	2.0	3.7	3.1
	Q 2	1.1	1.4	2.2	2.4	3.3	2.8
	Q 3	0.9	1.1	4.5	3.4	5.4	3.4
	Q 4	1.9	2.3	6.2	3.6	6.4	3.8
	Total	1.3	1.6	3.7	3.4	4.7	3.5

		YEAR I PRETEST		YEAR I POSTTEST		YEAR II PRETEST	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Reciting Alphabet	Q 1	3.3	4.0	6.9	7.1	9.2	7.8
	Q 2	4.1	5.0	7.3	8.5	9.9	9.3
	Q 3	4.6	6.9	11.9	9.9	15.0	9.3
	Q 4	7.8	8.9	15.4	10.3	15.5	10.3
	Total	5.0	6.7	10.4	9.7	12.3	9.6
Naming Numbers (3 items)	Q 1	0.1	0.4	0.3	0.6	1.0	1.0
	Q 2	0.0	0.0	0.3	0.7	0.7	1.0
	Q 3	0.2	0.4	0.7	1.0	1.0	1.0
	Q 4	0.4	0.7	1.2	1.2	1.7	1.4
	Total	0.2	0.5	0.6	1.0	1.1	1.2
Enumeration (4 items)	Q 1	2.4	1.2	3.2	1.0	3.8	0.5
	Q 2	2.0	1.3	3.1	1.0	3.5	0.9
	Q 3	3.3	1.0	3.4	1.0	3.8	0.5
	Q 4	2.8	1.1	3.7	0.6	4.0	0.2
	Total	2.6	1.2	3.4	1.0	3.8	0.6
Addition & Subtraction (4 items)	Q 1	0.9	1.0	1.4	1.0	1.6	0.8
	Q 2	0.6	0.9	1.2	1.1	1.3	1.1
	Q 3	1.3	0.9	1.5	1.1	1.7	0.8
	Q 4	1.0	1.0	2.0	0.9	2.0	0.7
	Total	0.9	1.0	1.5	1.1	1.6	0.9
Counting	Q 1	7.2	5.7	11.2	5.1	16.6	9.4
	Q 2	6.5	5.8	9.8	6.6	14.8	9.6
	Q 3	10.6	6.1	13.5	5.9	17.8	10.1
	Q 4	8.6	5.2	14.0	4.9	20.7	9.1
	Total	8.1	5.9	12.1	5.9	17.5	9.8
Relational Terms (10 items)	Q 1	6.5	2.0	7.4	2.3	8.4	1.4
	Q 2	6.5	1.9	8.0	1.9	8.6	1.5
	Q 3	6.5	1.5	7.5	1.6	8.9	1.1
	Q 4	6.6	1.9	8.4	1.6	9.2	1.0
	Total	6.5	1.9	7.9	1.9	8.8	1.3

		YEAR I PRETEST		YEAR I POSTTEST		YEAR II PRETEST	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Classification (10 items)	Q 1	4.2	2.0	5.4	2.3	7.2	2.3
	Q 2	4.0	2.4	5.4	2.4	7.1	2.2
	Q 3	4.9	2.3	6.1	2.5	7.6	2.2
	Q 4	5.2	2.1	8.0	1.5	8.3	1.7
	Total	4.5	2.2	6.2	2.4	7.5	2.2
Sorting (3 items)	Q 1	1.5	1.0	1.9	1.0	1.7	0.8
	Q 2	1.4	0.9	1.8	0.9	1.9	0.6
	Q 3	1.7	1.0	1.9	0.9	2.2	0.8
	Q 4	1.5	0.9	2.3	0.8	2.2	0.7
	Total	1.5	1.0	2.0	0.9	2.0	0.8
Peabody Raw	Q 1	34.3	9.6				
	Q 2	34.0	10.1				
	Q 3	37.9	12.2				
	Q 4	37.0	11.4				
	Total	35.7	11.0				
Peabody Mental Age	Q 1	42.3	10.8				
	Q 2	42.3	12.3				
	Q 3	47.2	13.9				
	Q 4	46.0	13.7				
	Total	44.3	12.9				
Chronological Age	Q 1	57.6	7.3				
	Q 2	53.5	6.6				
	Q 3	54.4	6.2				
	Q 4	52.4	6.1				
	Total	54.5	6.9				

Table 2

Pretest and Posttest Year I  
Pretest Means and Gains

Test	# Items	Q1 N=30		Q2 N=28		Q3 N=24		Q4 N=30	
		Pretest M	Gain SD	Pretest M	Gain SD	Pretest M	Gain SD	Pretest M	Gain SD
Body Parts	32	18.3	7.1	6.6	6.7	19.7	6.5	4.6	5.2
Letters	58	13.7	3.5	4.8	7.3	12.7	4.8	6.0	9.7
Forms	20	8.3	3.3	3.4	4.2	9.3	3.6	3.5	4.1
Numbers	54	17.3	8.3	7.9	6.9	15.1	6.7	9.4	8.3
Sorting	6	2.5	1.4	.9	1.8	2.3	1.4	.9	1.9
Relational Terms	17	9.5	2.9	1.7	3.0	10.3	2.4	1.9	3.0
Classification	24	11.2	3/6	3.5	4.6	10.8	4.6	3.4	5.1
Total	203	78.1	23.0	28.3	22.5	77.0	21.9	29.9	24.7
						88.9	23.8	37.7	31.9
						94.3	29.0	53.6	26.7

Table 3

## Follow-Through Subjects: Selected Parent Questionnaire Scale Scores

## Pretest and Posttest, Year I

Socioeconomic Status: Years of  
School Completed (Pretest Only)Parent Affluence  
(Pretest Only)

	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>Mean</u>	<u>S.D.</u>
Q1	24	8.6	3.5		6.8	3.1
Q2	25	10.4	2.6		8.4	1.6
Q3	24	10.1	1.2		8.1	1.4
Q4	27	10.0	3.8		8.4	3.4
Total	100	9.8	3.0		8.0	2.6

## Parent Expectations

		Pretest			Posttest	
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>Mean</u>	<u>S.D.</u>
Q1	24	32.2	8.8		32.8	4.7
Q2	25	35.9	8.2		36.4	6.2
Q3	24	36.0	5.8		35.5	4.2
Q4	27	38.4	5.3		38.6	5.0
Total	100	35.7	7.5		35.9	5.5

## Educational Uses

		Pretest			Posttest	
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>Mean</u>	<u>S.D.</u>
Q1	24	8.9	3.0		9.3	2.0
Q2	25	8.4	3.8		10.3	1.6
Q3	24	9.5	2.7		9.7	2.8
Q4	27	10.0	3.0		10.1	2.4
Total	100	9.2	3.2		9.9	2.3

Table-3 (continued)

## Child Affluence

		<u>Pretest</u>		<u>Posttest</u>	
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
Q1	24	2.6	1.5	2.7	1.5
Q2	25	3.1	1.9	3.6	1.5
Q3	24	2.8	1.5	3.2	1.1
Q4	27	4.0	1.2	3.9	1.4
Total	100	3.2	1.6	3.4	1.5



over, there are now sizeable differences among children in Q's 2, 3 and 4. Those who viewed most clearly gained most, but all gained some. Differences in gain exist among the various subscores and among the viewing quartiles. By the time of the pretest, Year II, many of the children particularly those in Q4, had attained the ceilings for some of the tests. It is left to the reader to peruse the tables for a more thorough understanding of the question of who learned what. We turn, instead, to the question of what happened to the 112 children when they entered school.

The teacher ratings were administered specifically for purposes of the follow-through of at-home children in last year's study who went on to school in 1970-71. In each of the sites, at-home study children were scattered among a large number of headstart kindergarten, and first grade classes. A follow-up technique was needed that would obtain teachers' ratings of the study children without singling these children out from their peers for special attention. With this in mind, and the knowledge that teachers could not be asked to assess certain children and not others without somehow altering their subsequent treatment of both groups, a simple expedient was devised. Teachers of classes in which any of the Sesame Street follow-through (Year I at-home disadvantaged) subjects were enrolled were asked to rank all of the children in their class. The task involved their rank-ordering all of their students according to each of the following dimensions: general readiness for school, verbal readiness, quantitative readiness, general intelligence, attitude toward school, relationships with peers, and physical motor coordination. The actual scales along with the instructions supplied the teachers appear in the Appendix.

The choice of the particular variables was made both on the basis of results of a content analysis of teacher ratings of early school readiness and on the need to assess the students in terms of some of the goals of Sesame Street. The survey, conducted by an ETS staff member\* for another purpose entirely, involved a national sample of about 250 first grade teachers. The teachers were asked first to make judgments about the degree to which each of their 7000 students was "ready" for school, and then to substantiate the judgments with behavior descriptions. The 7000 descriptions were then classified by independent raters with a good degree of interjudgmental reliability into ten categories. The ten categories included the following: verbal skills and understandings, quantitative skills and understandings, graphic skills, performing arts skill, general intellectual functioning, attitudes toward school and school work, conformity to classroom procedures, personal emotional development, peer relationships, and motor coordination and physical condition. The categories were then re-examined with an eye to the Sesame Street objectives. Graphic skills, performing arts skills, conformity to classroom procedures, and personal emotional development were eliminated entirely. Verbal and quantitative readiness, it was reasoned, should definitely have been enhanced by the learnings fostered by Sesame Street, if the show were to have considered itself successful. Motor coordination, of course, should not. General intelligence and attitude toward school (or at least teachers' perceptions of these) are gray areas and, as such, are of considerable interest to the evaluators. No direct attempts were made on Sesame Street to improve children's

\*Scarvia B. Anderson, The Making of a Pupil: Changing Children into School Children, Susan Colver Rosenberg Lecture, University of Chicago, July 17, 1968.

attitudes toward school; on the other hand, one of the show's major general concerns was to engender interest in and regard for learning. Besides, it was argued that if a child comes to school with knowledge of letters and numbers and with an ability to use relational terms and to classify and sort pictures he might be more likely to regard his school experience positively. They would make sense to him, being relatable to past experience. The decision to have teachers rank-order the children rather than use some sort of absolute rating scale was a methodological one. It was felt that the rank-ordering procedure would avoid tie scores and would therefore provide more variance among the resulting scores. In all, the teachers were quite cooperative once general permission had been obtained from the school systems involved to proceed with the research. The rankings of the subject children were converted into centiles.\*

Results of the teacher rankings are presented in Table 4. The rankings are presented by viewing quartiles (the quartiles having been derived by the method described above) and represent average centile ranks for follow-through subjects only, not their classmates. That is, the four scores given in the column labeled "General Readiness" represent the averages of the ranks given by their respective teachers to all follow-through subjects currently

\*The centile rank of a test score indicates what percent of the scores in a particular set of scores falls below the midpoint of that score interval. A centile rank is determined solely by the relation between a particular individual's score and the scores of the other individuals in the group being tested (or, in this case, rated). Centile ranks, therefore, range from near 0 to near 100 regardless of whether the group as a whole does "well" or "poorly". In this way, the rankings of children by different teachers are rendered comparable with one another, despite variations in schools and classrooms, and in the range of abilities represented by the students themselves. Centile ranks can be averaged, just as any other set of ranks can. The resulting average is a kind of composite score. See Ebel, Robert L. Measuring Educational Achievement. Prentice-Hall, Inc. Englewood Cliffs, New Jersey, 1965 Pp. 251-259.

Table 4

Follow-Through Subjects: Teacher Ratings Average Percentile Rank by Viewing Quartiles

General Readiness				Verbal			Quantitative		
N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
Q1	49.8	2.4	29	46.2	2.9	28	49.2	2.6	28
Q2	47.6	2.9	27	48.8	2.7	27	46.9	2.8	27
Q3	56.1	2.6	23	53.9	2.7	23	57.5	2.5	23
Q4	64.2	2.5	28	62.4	2.8	29	64.7	2.5	29
Total 111	54.5	2.7	107	52.8	3.9	107	54.7	2.7	107
.05 > p > .10				n.s.			.05 > p > .10		
General Intelligence				Attitude Toward School			Relations with Peers		
N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
Q1	48.6	2.6	28	42.2	3.1	28	45.9	2.8	28
Q2	52.0	2.9	28	46.1	2.6	28	50.7	2.8	28
Q3	54.6	2.6	23	61.5	2.4	24	53.6	2.6	24
Q4	61.4	2.8	30	69.0	2.5	30	66.1	2.2	30
Total 111	54.2	2.8	109	54.9	2.8	110	54.3	2.7	110
n.s.				.001 > p > .005			.02 > p > .025		
Coordination				Coordination			Coordination		
N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
Q1	46.1	2.9	24	55.7	2.4	Total 108	53.4	2.7	108
Q2	54.2	3.0	30	57.5	2.5		n.s.		

attending school. Thus, had nothing else been known about the follow-through children, their expected average ranks should have been 50. The resulting ranks were then subjected to the Kruskal-Wallis one-way analysis of variance which, in turn, produced the significance levels presented for each scale.\*\*

It can be seen from Table 4 that in all cases, the Q4 (high-viewing) children were ranked higher than average by their teachers. The rankings for general readiness and quantitative readiness approach statistical significance, and indicate clearly that the children who were the most frequent viewers of Sesame Street were deemed highly qualified by their teachers in both of these areas. The producers of Sesame Street would probably have hoped for and expected such findings. The most interesting result, however, is reflected in the teacher rankings of the childrens' attitude toward school. In this case, the differences are statistically significant at the 99 percent level, and indicate that the Q4 children (and to a lesser extent the Q3 children) are considered by their teachers to have better-than-average attitudes toward school. Contrary to the dire predictions of boredom and restlessness in school for the sophisticated veterans of Sesame Street teachings, the heaviest viewers are judged to be among the better prepared students with respect to attitudes for school. These same children are ranked higher with respect to peer relations than are the less frequent viewers of the show, another indication of the degree to which Sesame Street veterans are making at least adequate adjustments to school life.

\*\*The Kruskal-Wallis one-way analysis of variance is a non-parametric test for deciding whether independent samples are from different populations. It is particularly applicable to the data of this study because it requires that scores be converted into ranks. In this study, the scores are already in the form of ranks. The Kruskal-Wallis technique, in this case, tests the null hypothesis that there are no differences among the ratings by teachers of follow-up children in the four viewing quartiles. Compared with the F test, the most powerful parametric test, the Kruskal-Wallis test has asymptotic efficiency of 95.5 percent. See Siegel, Sidney, Nonparametric Statistics. McGraw-Hill. 1956. Pp. 184-193.



## TEACHER QUESTIONNAIRE

As a follow-up to a study of children's television viewing behavior, we are asking a selected group of kindergarten teachers to make judgments concerning the status of their students with respect to readiness for school. On the pages that follow, you will be asked to rank order all of the students in your class according to certain characteristics. We are interested in your candid judgments; these rankings will not become part of the students' records, nor will they be used for purposes other than those of the present research.

First, please complete items 1 through 6 below. The information you provide here is necessary to us for identification purposes.

1. Your full name \_\_\_\_\_  
                                    first                                    middle                                    last
2. School \_\_\_\_\_
3. Class \_\_\_\_\_
4. Years' Teaching Experience Prior to this Year \_\_\_\_\_
5. Number of children in class \_\_\_\_\_
6. Would you consider the students in this class to be more or less ready for school than students you have taught in the past, or about the same? (Circle one number for your answer.)

More ready.....1

About the Same.....2

Less ready.....3

Next, you will need a complete list of the children in your class. We would like you to assign a number to each child, starting with "1" and ending with the number of children in your class. Please attach the list to this questionnaire when you have finished with it.

On page 2 of the questionnaire, we would like you to rank order the students in your class according to the degree to which you feel they are generally ready for school. First, decide which student you consider to be the most ready in general terms. Write his number in the box marked 1. Next, choose the student who is second in your judgment in terms of general readiness for school. Enter his number in box 2. Next, choose the third most ready student and write his number in box 3. Continue in this manner until all of the students have been listed by number ending with the one you feel is generally least ready for school.

## 1. General Readiness

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

Least ready

In the pages that follow you will find six more phrases, each of which represents some component of school-readiness. We would like you to rank order the children in your class according to each of the dimensions named. The procedure to be followed is the same as the one you followed in rank ordering for general readiness. All of the children in the class should be listed by the numbers that you assigned. Please try to rank the children on each component independently of how you rank them on every other component. That is, for each component, ask yourself a series of questions: "Which child in my class is most ready for first grade in terms of verbal skills and understandings?" "Which child in my class is most ready for first grade in terms of quantitative skills and understandings?" And so on. In order to aid you in defining the dimensions, some examples of each are given.



## 2. Verbal Skills and Understandings

(ability to match, recognize and label letters, produce letter sounds, recite the alphabet; ability to match and recognize words)

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

Least ready

### 3. Quantitative Skills and Understandings

(ability to match, recognize and label numbers, recite numbers from 1 to 20; ability to perform some number operations such as addition and subtraction; ability to recognize and label geometric forms)

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

Least ready

## 4. General Intellectual Functioning

(quality of visual and auditory discrimination; ability to match objects on the basis of form, size or position; understands part/whole relationships; understanding of relational concepts such as same/different; none/some/all; ability to sort and classify on the basis of size, form, function, class, quantity; ability to reason and solve problems)

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
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21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

Least ready

5. Attitudes Toward School and School Work

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
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22.	
23.	
24.	
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26.	
27.	
28.	
29.	
30.	

Least ready

## 6. Peer Relationships

(ability to cooperate and resolve conflicts; ability to recognize differing perspectives; degree of awareness of values, feelings, preferences, modes of behavior of others)

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
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22.	
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24.	
25.	
26.	
27.	
28.	
29.	
30.	

Least ready

# Motor Coordination and Physical Condition

Most ready

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

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19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

Least ready