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An analysis of verbatim memorization in the Indiana State Teachers College Theatre Program

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AN ANALYSIS OF VERBATIM MEMORIZATION IN THE INDIANA STATE TEACHERS COLLEGE THEATRE PROGRAM

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TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Importance of verbatim memorization	1
	Purpose of this research	2
	Procedures of the research	2
	Standards used in judging correctness of speech	3
	Source of data	4
	Limitations of the research	5
II.	PRESENTATION OF DATA	9
	A. The extent of verbatim memorization and the nature of non-verbatim memorization at Indiana State Teachers College	9
	Extent of verbatim memorization	9
	Nature of non-verbatim memorization	11
	B. Relationship of verbatim memorization and the rehearsal schedule	14
	Relationship of verbatim memorization and number of rehearsals	15
	Relationship of verbatim memorization and number of days in rehearsal	17

CHAPTER PAGE

C. Objective analysis of possible influencing factors on verbatim memorization of the actor 19
Procedure of analysis 20
Verbatim memorization and intelligence of actor 20
Verbatim memorization and educational achievement of the actor 30
Verbatim memorization and experience of the actor 37
Verbatim memorization and size of role 46
Verbatim memorization and difference of sex 49
Verbatim memorization and difference of age 50
D. Subjective influences of verbatim memorization in the theatre 52
Attitude of the actor 52
Psychological Forgetfulness 54

III. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS 59
Summary of extent of verbatim memorization 59
Summary of nature of non-verbatim memorization 59
Summary of verbatim memorization and the rehearsal schedule 60

CHAPTER PAGE

Summary of objective analysis of possible influencing factors on verbatim memorization of the actor 60

Summary of subjective influences of verbatim memorization in the theatre 63

Final summary 64

Recommendations 65

BIBLIOGRAPHY 67

SUPPLEMENTARY BIBLIOGRAPHY 69

APPENDIX A 73

APPENDIX B 74

LIST OF TABLES

TABLE		PAGE
I.	Extent of Verbatim Memorization at Indiana State Teachers College	10
II.	Frequency of Four Types of Non-Verbatim Speech	12
III.	Percentages of Four Types of Non-Verbatim Speech	13
IV.	Relationship of Verbatim Memorization and Number of Rehearsals	16
V.	Relationship of Verbatim Memorization and Number of Days in Rehearsal	18
VI.	Relationship of Verbatim Memorization Percentages and Psychological Percentile Scores (135 plus)	23
VII.	Relationship of Verbatim Memorization Percentages and Psychological Percentile Scores (85-134	24
VIII.	Relationship of Verbatim Memorization Percentages and Psychological Percentile Scores (39-84)	25
IX.	Relationship of Verbatim Memorization Percentages and Psychological Percentile Scores (21-38)	25
X.	Relationship of Verbatim Memorization Percentages and Psychological Percentile Scores (10-20)	27
XI.	Summary of Relationship of Verbatim Memorization Percentages and Psychological Percentile Score	29

TABLE		PAGE
XII.	Relationship of Verbatim Memorization Percentages and Scholarship Indices (135 Plus)	31
XIII.	Relationship of Verbatim Memorization Percentages and Scholarship Indices (85-134)	32
XIV.	Relationship of Verbatim Memorization Percentages and Scholarship Indices (39-84)	33
XV.	Relationship of Verbatim Memorization Percentages and Scholarship Indices (21-38)	34
XVI.	Relationship of Verbatim Memorization Percentages and Scholarship Indices (10-20)	35
XVII.	Summary of Relationship of Verbatim Memorization Percentages and Scholarship Indices	37
XVIII.	Relationship of Verbatim Memorization Percentages and Previous Experience (135 Plus)	39
XIX.	Relationship of Verbatim Memorization Percentages and Previous Experience (85-134)	40
XX.	Relationship of Verbatim Memorization Percentages and Previous Experience (39-84)	41
XXI.	Relationship of Verbatim Memorization Percentages and Previous Experience (21-38)	42
XXII.	Relationship of Verbatim Memorization Percentages and Previous Experience (10-20)	43

TABLE		PAGE
XXIII.	Summary of Relationship of Verbatim Memorization Percentages and Experience	46
XXIV.	Relationship of Verbatim Memorization and Number of Speeches Recorded	48
XXV.	Relationship of Verbatim Memorization and Difference of Sex	49
XXVI.	Comparison of Juvenile and College-Age Actors' Verbatim Memorization Achievement	51

CHAPTER I

INTRODUCTION

The poet, the painter, the writer of prose, the dancer, the sculptor, and the philosopher are able to communicate their artistic genius in a direct manner to the reader or the observer. The musician, the architect, and the dramatist, however, are forced to transmit their artistic expression by means of an interpretative medium. The composer's music is interpreted by one or more muscians; the architect's blueprint is interpreted by the contractor and those who work for him; the playwright submits his play to the producer, the director, the technicians, and the actors, who interpret it for the audience.

The play is not a completed work of art until it is produced; hence, a portion of the total worth of a drama depends upon these middle men. These dispensers of the playwright's art are often able in many ways to enhance that art in clarity and beauty. There are, however, many problems involved in the transformation of the written play into an actual performance of it.

One such problem is that of non-verbatim representation of the script. A change of words during a performance of

any play of merit must necessarily damage the effectiveness and the unity of that play. Any good play has been carefully written and rewritten by the playwright. Each word has been meaningfully chosen. Each speech, as it has been written, has a purpose in fulfilling the total effect of the play. The duty of the playwright is to write the play; the duty of the actor to the playwright is to "Speak the speech, I pray you, as I pronounced it to you . . ."[1]

Purpose of this research. This research is the result of the curiosity of the writer to learn the extent of verbatim memorization and the nature of those departures from the verbatim, to discover the relationship between verbatim memorization and the rehearsal schedule, and to see the relationship of various factors which may influence the degree of perfection of verbatim performance in the Indiana State Teachers College theatre program.

In so far as is known, this is the first investigation of this nature ever conducted. The purpose of this thesis is to report the findings of the analysis of these problems.

Procedures of this Research. The procedure used to gather data in solution of these problems, briefly stated, was to listen to recordings of public presentations of

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1 William Shakespeare, Hamlet, III, ii, 1-2.

fourteen full-length plays by the Sycamore Players, the dramatic organization of Indiana State Teachers College, and to compare the spoken lines as heard on the recordings with the written lines as found in the script included in the production books for each of the recorded plays. Each of the fourteen recordings was completely heard at least twice. Each line was checked on a tabulation sheet as being the correct or incorrect verbatim delivery of the play.

Standards used in judging correctness of speech. It was necessary to set up a list of standards to determine whether or not a speech was correct before listening to the recordings. The following was a list of those standards used:

1. The standards set up by the writer were arbitrary but consistent.

2. A speech was defined as being an uninterrupted sequence of words spoken by one of the characters in the play.

3. Crowd noises or indefinite speeches were not considered.

4. An addition or omission of an exclamation or a gasp was not considered to be incorrect.

5. If a section of the play was omitted because of imperfect memorization, the actor whose mistake caused the omission was credited with an error, and the portion of the play omitted was not further considered.

6. Recorded speeches inaudible to the listener were not considered.

7. Each speech recorded was considered correct or incorrect as a unit. If an actor had a particularly long speech, it was broken down into eight line units; each unit was then tabulated separately.

8. In the event of more than one error in the same speech, the actor was charged with an incorrect speech only for the first error.

9. In case of disagreement between the two separate tabulations for each recording, a mean was computed on the basis of one-third strength to the first tabulation and two-thirds strength to the second tabulation. The second tabulation was given greater weight because of the writer's more thorough understanding of the play during its second tabulation.

10. In case of doubt as to the correctness of any speech or group of speeches, the listener replayed that portion of the recording.

11. An incorrect speech was placed into one of four categories: substitution, addition, subtraction, or rearrangement.

12. The error was termed addition if the actor added a word or group of words not included in the script.

13. The error was termed subtraction if a word or a group of words included in the script were omitted by the actor.

14. The error was termed substitution if a word or a group of words included in the script were replaced by another word or group of words by the actor.

15. The error was termed rearrangement if the actor uttered all of the words included in the script but in an incorrect sequence.

Source of data. The recordings were collected over a period of nearly six years and were, of course, the primary source of data for this survey. Other necessary data were information about the plays recorded and information about the

actors appearing in those plays. Information about the plays, such as date of performance, number of rehearsals, number of days in rehearsal, and names of the actors in the cast, was gathered by investigating the production books on file in the office of the director of dramatics.

Actors having fewer than ten lines were considered as miscellaneous; their speeches were considered in computing the verbatim memorization percentages of the plays, but their percentages were not computed individually. However, there were one hundred and five actors and actresses, appearing in one hundred and sixty-nine characterizations of ten or more speeches, who required investigation. Data concerning those actors' percentile scores on the American Council of Education Psychological Examination, their scholarship indices, and their previous experience in the Indiana State Teachers College theatre program were gathered in the offices of the dean of instruction, the registrar, the director of research, and the head of the speech department at Indiana State Teachers College. Specific procedures and sources of data will be discussed in more detail in subsequent chapters.

Limitations of the research. Before reporting the findings of this survey, several general limitations should be noted. Although it is believed that fourteen recordings serve as a sufficient number to obtain reliable data as to

the verbatim memorization situation at Indiana State Teachers College, it would be unwise to assume that this local situation might be transformed into an accurate national or world picture of verbatim memorization in the theatre. There is a possibility that such might be the case, but there is no certainty; hence, the writer will limit himself to localized conclusions from his localized evidence that may possibly, but not conclusively, be true on a wider scope.

Some of the recordings were almost six years old; some of them have been played many times. Furthermore, the productions were recorded under good but by no means ideal conditions. Therefore, the recordings were not always clear. An honest attempt was made to minimize errors due to imperfect recording by refusing to consider any speech that was inaudible or unintelligible.

Although each recording was heard at least twice, there is almost certain to be some inaccuracy in tabulating the comparison between script and recording. An effort was made to keep this error at a minimum.

The practice of counting a complete speech or an eight-line unit of a speech correct or incorrect is not wholly valid. A speech of several words was given the same degree of importance as an eight-line speech. In order to avoid this invalidity, it would have been necessary to count each

individual word as verbatim or otherwise. This seemed to be an almost impossible task. Furthermore, it would seem that the memorization of an idea is more significant than mere accuracy of words.

Each speech unit was judged either completely correct or completely incorrect. Consequently, a speech having in it more than one error did not receive its proper emphasis. This procedure was necessary, however, in order to compute verbatim memorization percentages.

Several factors, believed to have a great influence on verbatim memorization, were of such subjective nature that they could not be treated reliably in an objective manner. These factors are to be examined briefly in Chapter V. Among them is the actor's degree of willingness to memorize his lines verbatim. Consequently, the conclusions of this research are based on the actor's actual memorization achievement and not on his ability to memorize.

The purpose of this study is to show the extent of verbatim memorization, the nature of non-verbatim representation, the relationship of rehearsal schedules to verbatim memorization, and the relationships of verbatim memorization to the ability and experience of the actors--to analyze verbatim memorization as found in fourteen

productions at Indiana State Teachers College.

CHAPTER II

PRESENTATION OF DATA

A. THE EXTENT OF VERBATIM MEMORIZATION AND THE NATURE OF NON-VERBATIM MEMORIZATION AT INDIANA STATE TEACHERS COLLEGE

Extent of verbatim memorization. The first problem of this research was to discover the extent of verbatim memorization in the theatre program at Indiana State Teachers College. Table I shows the findings of this investigation. A verbatim memorization percentage was computed for each of the fourteen recorded productions. This was done by dividing the number of verbatim lines of the play by the total number of recorded lines of the play. Each production was assigned a letter in Table I; These code letters are identified in Appendix A., on Page 69. The number of verbatim speeches was placed in the first column; the number of incorrect speeches was placed in the second column; the total number of recorded speeches was placed in the third column; and the verbatim memorization percentage was placed in the fourth column. Totals for each column appear at the bottom of the table.

TABLE I

THE EXTENT OF VERBATIM MEMORIZATION AT INDIANA STATE TEACHERS COLLEGE

PLAY	VERBATIM	INCORRECT	TOTAL	PERCENTAGE
A	1051	213	1264	83.15
B	1188	293	1481	80.22
C	586	173	759	77.21
D	390	118	508	76.77
E	638	201	839	76.04
F	617	197	814	75.80
G	975	318	1293	75.41
H	800	269	1069	74.84
I	769	291	1060	72.55
J	494	187	681	72.54
K	708	298	1006	70.38
L	912	469	1381	66.04
M	822	434	1256	65.45
N	779	485	1264	61.63
TOTAL	10,729	3,946	14,675	73.11

The percentage of verbatim memorization for the fourteen productions included in this study was 73.11 per cent. Nearly three of every four speeches were delivered verbatim. Nearly five of every six speeches, or 83.15 per cent, were delivered word for word in production "A"; nearly five of every eight speeches, or 61.63 per cent, were verbatim in production "N".

Nature of non-verbatim memorization. The second problem was to discover the nature of inaccurate speeches in the fourteen recorded productions. Tables II and III analyze the findings of this investigation. Each incorrect speech was classified into one of four groups: substitution, addition, subtraction, or rearrangement, terms that were defined in Chapter I. Table II lists the frequency with which each type of error occurred in each of the fourteen recorded productions. Table III, on Page 13, lists the percentage of each type of error of the total incorrect speeches for each production. These percentages were computed by dividing the number of each type of error by the total number of errors for each production.

TABLE II

FREQUENCY OF FOUR TYPES OF NON-VERBATIM SPEECHES

PLAY	SUBSTI-TUITION	ADDITION	SUB-TRACTION	REAR-RANGEMENT	TOTAL
A	86	70	35	22	213
B	103	73	84	33	293
C	64	43	40	26	173
D	31	39	34	14	118
E	62	48	59	32	201
F	45	42	83	27	197
G	106	114	71	27	318
H	104	77	65	23	269
I	126	94	43	28	291
J	75	37	41	34	187
K	134	92	43	29	298
L	178	158	87	46	469
M	165	121	112	36	434
N	178	141	114	52	485
TOTAL	1457	1149	911	429	3946

TABLE III

PERCENTAGES OF FOUR TYPES OF NON-VERBATIM SPEECHES

PLAY	SUBSTI-TUTION	ADDITION	SUB-TRACTION	RE-AR-RANGEMENT	TOTAL
A	40.38	32.86	16.43	10.33	100.00
B	35.15	24.91	28.67	11.26	99.99
C	36.99	24.86	23.12	15.03	100.00
D	26.27	33.05	28.81	11.86	99.99
E	30.85	23.88	29.35	15.92	100.00
F	22.84	21.32	42.13	13.71	100.00
G	33.33	35.85	22.33	8.49	100.00
H	38.66	28.62	24.16	8.55	99.99
I	43.30	32.30	14.78	9.62	100.00
J	40.11	19.79	21.93	18.18	100.01
K	44.97	30.87	14.43	9.73	100.00
L	37.95	33.69	18.55	9.81	100.00
M	38.02	27.88	25.81	8.29	100.00
N	36.70	29.07	23.51	10.72	100.00
TOTAL	36.92	29.12	23.09	10.87	100.00

Substitution, with 36.92 per cent, was the most prevalent type of departure from a verbatim representation of the fourteen plays. Substitution was the most common type of error in eleven of the fourteen plays, second most common in two others, and third in the remaining production. Percentages of substitution for individual plays ranged from 22.84 per cent to 44.97 per cent. Addition, with 29.12 per cent, was second only to substitution; it ranked highest in two productions, second in eight productions, and third in four productions. Percentages of addition for individual plays ranged from 19.79 per cent to 35.85 per cent. Subtraction, with 23.09 per cent, ranked third; it ranked first in one production, second in four productions, and third in the remaining nine productions. Subtraction had the greatest range of percentages, from 14.43 per cent to 42.13 per cent. Rearrangement, with 10.87 per cent, was the least common form of misrepresentation of the script in each of the fourteen productions; its percentages ranged from 8.29 per cent to 18.18 per cent.

B. RELATIONSHIP OF VERBATIM MEMORIZATION AND THE REHEARSAL SCHEDULE

The competent director of today's theatre must carefully plan his rehearsal schedule on the basis of many con-

siderations. He must choose a time for rehearsals when the cast can most conveniently attend. He must plan his rehearsals far enough in advance so that his actors and actresses can have a clear enough understanding of the play and of their individual character to give a convincing interpretation. Should he also prepare his rehearsal schedule in consideration of verbatim memorization? Is there an optimum number of rehearsals which will effect a more nearly perfect verbatim presentation of the play? Is there an optimum number of days between the first rehearsal and the first presentation of a production?

Relationship of verbatim memorization and number of rehearsals. The purpose of this chapter is to answer these questions. The director, obviously, must cast his play early enough to allow his players sufficient time in which to memorize their lines. The rehearsal schedule must consider verbatim memorization at least to that extent. Is there, however, an optimum number of rehearsals that will achieve the best memorization results?

Table IV lists the verbatim memorization percentage and the number of rehearsals for each of the recorded productions.

TABLE IV

RELATIONSHIP OF VERBATIM MEMORIZATION AND NUMBER OF REHEARSALS

PLAY	VERBATIM MEMORIZATION PERCENTAGE	NO. OF REHEARSALS
A	83.15	23
B	80.22	14
C	77.21	22
D	76.77	15
E	76.04	22
F	75.80	28
G	75.41	19
H	74.84	16
I	72.55	25
J	72.54	24
K	70.38	19
L	66.04	15
M	65.45	19
N	61.63	19
MEAN	73.43	20

Table IV indicates that there is very little or no relationship between the number of rehearsals and the verbatim representation of the production. The number of rehearsals ranged from fourteen to twenty-eight; productions with many rehearsals and productions with few rehearsals appeared among both the highest and the lowest percentages. A coefficient of correlation was computed between verbatim memorization percentages and numbers of rehearsals, and this coefficient substantiates the fact of little or no relationship between the two factors. The coefficient was .168, with a probable error of plus or minus .175. This coefficient of correlation was so low that it clearly shows no relationship of any significance.

Relationship of verbatim memorization and number of days in rehearsal. Table V shows the relationship between verbatim memorization and the number of days between the first rehearsal and the first performance of the play. Table V lists the percentage of verbatim memorization and the number of days in rehearsal for each recorded production.

TABLE V

RELATIONSHIP OF VERBATIM MEMORIZATION AND NUMBER OF DAYS IN REHEARSAL

PLAY	VERBATIM PERCENTAGE	DAYS IN REHEARSAL
A	83.15	33
B	80.22	24
C	77.21	28
D	76.77	8
E	76.04	25
F	75.80	28
G	75.41	26
H	74.84	31
I	72.55	31
J	72.54	31
K	70.38	22
L	66.04	15
M	65.45	20
N	61.63	19
MEAN	73.43	24.36

Table V indicates that there is some relationship between verbatim memorization and the number of days in rehearsal. Of the eight productions that have percentages about that of the mean percentage, six had more days in rehearsal than the mean number of days in rehearsal. Of the six productions with percentages below the mean, four had fewer days in rehearsal than the mean. However, there are departures from this rule. The coefficient of correlation between verbatim memorization and the number of days in rehearsal is .409, with a probable error of plus or minus .150. This coefficient is of sufficient size to be termed significant, but it is so small that the relationship is slight. There is a positive relationship between high percentages of verbatim memorization and high number of days in rehearsal, but only a slight one.

C. OBJECTIVE ANALYSIS OF POSSIBLE INFLUENCING FACTORS ON VERBATIM MEMORIZATION OF THE ACTOR

Do intelligent actors memorize more exactly than less intelligent ones? Do actors with high educational achievement memorize more exactly than ones with lesser achievement? Do experienced actors memorize more exactly than less experienced ones? Do actors with leading roles memorize more

exactly than actors with small roles? Do girls memorize more exactly than boys? Do actors of college age memorize more exactly than juvenile actors? The purpose of this chapter is to answer these questions.

Procedure of analysis. A percentage of verbatim memorization was computed for each actor who had ten or more speeches in the fourteen recorded productions. These percentages were then correlated with such aspects as the actor's score on the American Council of Education Psychological Examination, his scholarship index, the number of his previous characterizations in productions of the Sycamore Players, the size of his role, his sex, and his age.

There were one hundred and sixty-nine characterizations by one hundred and five actors studied in this research. These characterizations were placed into five categories, on the basis of number of speeches recorded. This was done because it would have been unfair to compare the memorization of an actor who had ten speeches with one who had four hundred and forty-three speeches. Each correlation was computed five times, once for each of the five groups.

Verbatim memorization and intelligence of actor. Tables VI, VII, VIII, IX, and X show the relationship between verbatim memorization percentages of each characterization and the percentile score on the American Council of Education

Psychological Examination of the actor who played the characterization. Only one hundred and forty-three of the one hundred and sixty-nine characterizations of the fourteen recorded productions were played by actors who had percentile scores recorded for them. Consequently, this section of the chapter treats only that group of characterizations.

Table VI compares percentile scores and verbatim memorization percentages of characterizations of one hundred and thirty-five or more speeches. Table VII treats characterizations of from eighty-five to one hundred and thirty-four speeches. Table VIII is concerned with characterizations of from thirty-nine to eighty-four speeches. Table IX examines characterizations of from twenty-one to thirty-eight speeches. Table X treats characterizations of from ten to twenty speeches.

The organization of each of these five tables is the same. The first column indicates the number representing the actor who performed the role. The second column lists the letter of the production in which the characterization was included. The third column gives the verbatim memorization percentage of that characterization. The fourth column gives the percentile score of the psychological examination of the actor who played the role.

The mean verbatim memorization percentage of each of the five groups and their mean psychological percentile score

are listed at the bottom of the tables. The coefficient of correlation, with its probable error, between those two factors is also listed at the bottom of the tables.

Tables VI, VII, VIII, IX, and X follow on successive pages.

TABLE VI

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND PSYCHOLOGICAL PERCENTILE SCORES (135 PLUS)

ACTOR	PLAY	VERBATIM PERCENTAGE	PERCENTILE
1	G	93.98	94
2	A	93.73	79
3	B	87.88	88
4	B	87.12	44
5	B	84.24	53
8	H	80.17	98
9	K	80.00	35
10	A	79.52	51
11	G	78.83	96
12	A	78.50	67
13	F	77.86	83
11	F	75.63	96
9	C	75.33	35
14	I	75.27	98
15	N	74.67	41
16	L	73.42	86
18	B	71.04	96
19	F	69.32	37
20	B	68.78	42
21	L	64.20	69
16	E	63.52	86
22	K	60.87	80
15	L	60.66	41
8	N	60.57	98
23	N	60.34	85
23	L	54.59	85
18	K	54.39	96
25	N	48.36	55
26	M	48.31	40
MEAN		70.85	70.83

r .061 plus or minus .125

TABLE VII

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND PSYCHOLOGICAL PERCENTILE SCORES (85-134)

ACTOR	PLAY	VERBATIM PERCENTAGE	PERCENTILE
27	B	93.02	75
19	A	90.08	37
28	J	88.64	39
29	H	88.24	91
16	M	88.18	86
31	B	87.61	17
14	J	86.36	98
33	C	84.00	91
2	D	82.91	79
35	B	81.51	72
13	N	80.90	83
36	C	79.79	99
38	L	78.79	72
39	H	78.70	87
41	D	77.06	31
3	M	75.00	88
42	A	74.24	65
43	C	72.94	24
44	C	70.18	76
38	M	69.97	72
45	I	69.47	70
46	L	64.46	84
18	N	59.63	96
25	M	55.73	55
42	I	45.63	65
MEAN		76.49	70.08

r -.032 plus or minus .135

TABLE VIII

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND PSYCHOLOGICAL PERCENTILE SCORES (39-84)

ACTOR	PLAY	VERBATIM PERCENTAGE	PERCENTILE
1	I	92.73	94
51	B	92.68	58
53	K	91.11	62
54	F	90.20	84
55	B	90.00	45
43	K	88.37	24
56	K	86.59	48
46	D	86.00	59
57	J	86.00	84
9	G	82.14	35
43	G	80.77	24
58	K	79.10	47
9	A	77.78	35
59	H	77.27	15
16	H	76.19	67
12	C	76.19	86
60	M	75.47	30
33	K	74.65	91
36	F	72.46	99
8	E	71.70	98
42	E	70.00	65
61	D	67.65	61
45	J	66.67	70
62	G	66.07	71
42	N	65.52	65
19	D	65.12	37
26	D	55.56	40
63	I	55.41	61
26	N	47.06	40
63	J	31.71	61
MEAN		74.72	58.53

r .042 plus or minus .123

TABLE IX

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND PSYCHOLOGICAL PERCENTILE SCORES (21-38)

ACTOR	PLAY	VERBATIM PERCENTAGE	PERCENTILE
66	I	91.18	60
67	B	87.50	34
68	I	87.10	50
69	I	85.29	72
70	I	83.33	72
56	I	82.14	48
28	I	80.00	39
23	E	78.13	85
72	K	77.78	22
73	H	77.42	8
74	I	74.07	3
63	M	73.68	61
75	H	73.68	74
13	I	72.97	83
13	K	72.73	83
76	E	72.41	17
77	M	71.79	66
5	E	71.43	53
78	E	70.33	62
18	E	69.44	96
79	H	69.23	99
5	N	68.57	53
78	H	66.67	62
77	N	65.38	66
26	H	64.29	40
35	N	62.86	72
25	H	62.50	55
41	K	61.54	31
81	N	57.58	63
55	L	50.00	45
MEAN		72.61	55.80

r -.065 plus or minus .123

TABLE X

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND PSYCHOLOGICAL PERCENTILE SCORES (10-20)

ACTOR	PLAY	VERBATIM PERCENTAGE	PERCENTILE
82	I	100.00	97
83	I	100.00	98
84	I	94.12	11
63	E	93.75	61
77	E	92.31	66
85	E	92.31	77
86	E	86.67	99
87	I	85.71	88
88	K	85.71	90
89	I	82.35	68
79	N	81.25	99
90	H	75.00	99
91	J	75.00	71
93	E	75.00	96
94	J	72.73	83
95	I	72.22	84
12	I	70.59	67
16	J	70.00	86
97	I	69.23	17
98	J	68.42	31
100	I	61.54	67
101	I	57.89	82
86	H	56.25	99
12	K	55.56	67
91	K	54.55	44
102	A	54.55	71
104	E	50.00	90
105	I	40.00	72
42	H	40.00	65
MEAN		72.35	73.97

r .103 plus or minus .124

The verbatim memorization percentages were arranged in descending order. If there had been a close relationship between the final two columns of figures, the psychological percentiles would also have fallen in an approximate descending order. This was not the case. In fact, there seemed to be almost no order of any sort in the arrangement of the psychological percentile scores. Furthermore, the coefficients of correlation were so low as to be completely without significance, indicating almost no relationship between verbatim memorization and psychological percentile scores.

Percentile scores on the psychological examination were discovered for eighty-three actors who appeared in ten or more recorded speeches. Total percentages of verbatim memorization were computed for each of these actors by dividing each actor's total verbatim speeches in every characterization in which he appeared throughout the fourteen recorded productions by his total number of recorded speeches in every characterization. The total percentages of the eighty-three actors were then correlated with the percentile score of the actors. The coefficient of correlation was .012, with a probable error of plus or minus .074. The "whole" correlation reiterates the contention of the "part" correlations that little or no relationship exists between verbatim memorization and a measure of intelligence.

Table XI summarizes the information of the previous five tables and of the preceding paragraph. The mean verbatim memorization percentage for each of the five groups is listed in the first column; the mean psychological percentile for each group is listed in the second column; the coefficients of correlation are listed in the third column; and the probable errors are listed in the fourth column. The mean of each column for the five groups is listed at the bottom as are the total computations explained in the preceding paragraph.

TABLE XI

SUMMARY OF RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND PSYCHOLOGICAL PERCENTILE SCORES

GROUP	MN. VERBATIM PERCENTAGE	MN. PERCENTILE	COEFF. OF CORRELATION	P.E.
135 +	70.85	70.83	.061	±.125
85-134	76.49	70.08	-.032	±.135
39-84	74.72	58.53	.042	±.123
21-38	72.61	55.80	-.065	±.123
10-20	72.35	73.97	.103	±.124
MEAN	73.40	65.84	.022	±.126
TOTAL	73.16	64.06	.012	±.074

Verbatim memorization and educational achievement of the actor. The second question to be studied in this chapter is whether or not actors with high educational achievement memorize more exactly than actors with mediocre achievement. The scholarship index at Indiana State Teachers College was used to represent educational achievement, and the percentage of verbatim memorization was used to indicate the exactness of memorization. One hundred and forty-nine characterizations were by actors who had attended Indiana State Teachers College and hence had on record a scholarship index. These characterizations were also divided into five groups on the basis of number of speeches.

Tables XII, XIII, XIV, XV, and XVI, which appear on successive pages, show the relationship of verbatim memorization and educational achievement. The number of the actor appears in the first column, the letter of the play in the second, the verbatim memorization percentage of the characterization in the third, and the scholarship index of its actor in the fourth. The means and the coefficient of correlation, with its probable error, are listed at the bottom of the tables.

TABLE XII

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND SCHOLARSHIP INDICES (135 PLUS)

ACTOR	PLAY	VERBATIM PERCENTAGE	SCHOLARSHIP INDICES
1	G	93.98	88.1
2	A	93.73	50.0
3	B	87.88	61.0
4	B	87.12	51.1
5	B	84.24	66.2
8	H	80.17	83.5
9	K	80.00	66.6
10	A	79.52	73.9
11	G	78.83	76.3
12	A	78.50	70.3
13	F	77.86	93.8
11	F	75.63	76.3
9	C	75.33	66.6
14	I	75.27	82.3
15	N	74.67	67.8
16	L	73.42	92.2
18	B	71.04	86.2
19	F	69.32	69.3
20	B	68.78	75.8
21	L	64.20	69.3
16	E	63.52	92.2
22	K	60.87	79.1
15	L	60.66	67.8
8	N	60.57	83.5
23	N	60.34	50.4
23	L	54.59	50.4
18	K	54.39	86.2
25	N	48.36	53.5
26	M	48.31	53.3
MEAN		70.85	71.83

r .100 plus or minus .124

TABLE XIII

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND SCHOLARSHIP INDICES (85-134)

ACTOR	PLAY	VERBATIM PERCENTAGE	SCHOLARSHIP INDICES
27	B	93.02	75.0
19	A	90.08	69.3
28	J	88.64	64.5
29	H	88.24	78.6
16	M	88.18	92.2
31	B	87.61	56.6
14	J	86.36	82.3
33	C	84.00	55.7
2	D	82.91	50.0
34	C	81.90	70.0
35	B	81.51	61.5
13	N	80.90	93.8
36	C	79.79	80.3
38	L	78.79	85.4
39	H	78.70	64.5
41	D	77.06	76.7
3	M	75.00	61.0
42	A	74.24	62.5
43	C	72.94	69.6
44	C	70.18	39.7
38	M	69.97	85.4
45	I	69.47	87.7
46	L	64.46	63.8
47	B	64.04	90.0
48	G	61.54	72.1
18	N	59.63	86.2
25	M	55.73	53.5
42	I	45.63	62.5
MEAN		71.09	75.61

r .073 plus or minus .127

TABLE XIV

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND SCHOLARSHIP INDICES (39-84)

ACTOR	PLAY	VERBATIM PERCENTAGE	SCHOLARSHIP INDICES
1	I	92.73	88.1
51	B	92.68	31.2
53	K	91.11	63.3
54	F	90.20	79.8
55	B	90.00	56.7
43	K	88.37	69.6
56	K	86.59	58.4
46	D	86.00	30.0
57	J	86.00	63.8
9	G	82.14	66.6
43	G	80.77	69.6
58	K	79.10	53.6
9	A	77.78	66.6
59	H	77.27	64.7
16	H	76.19	70.3
12	C	76.19	92.2
60	M	75.47	64.6
33	K	74.65	55.7
36	F	72.46	80.3
8	E	71.70	83.5
42	E	70.00	62.5
61	D	67.65	56.5
45	J	66.67	87.7
62	G	66.07	78.1
42	N	65.52	62.5
19	D	65.12	69.3
26	D	55.56	53.3
63	I	55.41	55.2
26	N	47.06	53.3
47	H	37.84	90.0
63	J	31.71	55.2
MEAN		73.16	68.78

r -.084 plus or minus .120

TABLE XV

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND SCHOLARSHIP INDICES (21-38)

ACTOR	PLAY	VERBATIM PERCENTAGE	SCHOLARSHIP INDICES
65	J	94.12	42.6
66	I	91.18	77.7
67	B	87.50	69.8
68	I	87.10	62.0
69	I	85.29	76.7
70	I	83.33	68.5
56	I	82.14	58.4
28	I	80.00	64.5
23	E	78.13	50.4
72	K	77.78	67.1
73	H	77.42	50.0
74	I	74.07	54.0
63	M	73.68	55.2
75	H	73.68	56.2
13	I	72.97	93.8
13	K	72.73	93.8
76	E	72.41	63.4
77	M	71.49	56.9
5	E	71.43	66.2
78	E	70.33	35.7
18	E	69.44	86.2
79	H	69.23	88.8
5	N	68.57	66.2
80	C	68.18	71.8
78	H	66.67	35.7
77	N	65.38	56.9
26	H	64.29	53.3
35	N	62.86	61.5
25	H	62.50	53.5
41	K	61.54	76.7
81	N	57.58	46.8
55	L	50.00	56.7
MEAN		73.25	62.84

r .086 plus or minus .118

TABLE XVI

RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND SCHOLARSHIP INDICES (10-20)

ACTOR	PLAY	VERBATIM PERCENTAGE	SCHOLARSHIP INDICES
82	I	100.00	93.6
83	I	100.00	96.9
84	I	94.12	48.3
63	E	93.75	55.2
77	E	92.31	56.9
85	E	92.31	29.1
86	E	86.67	65.2
87	I	85.71	76.9
88	K	85.71	68.8
89	I	82.35	76.9
79	N	81.25	88.8
90	H	75.00	64.6
91	J	75.00	44.2
93	E	75.00	95.5
94	J	72.73	65.0
95	I	72.22	46.4
12	I	70.59	70.3
16	J	70.00	92.2
97	I	69.23	50.0
98	J	68.42	55.5
100	I	61.54	67.3
101	I	57.89	45.0
86	H	56.25	65.2
12	K	55.56	70.3
91	K	54.55	76.6
102	A	54.55	44.2
104	E	50.00	73.9
105	I	40.00	74.6
42	H	40.00	62.5
MEAN		72.34	66.20

r .082 plus or minus .124

The five previous tables reveal that there is very little relationship existing between verbatim memorization and educational achievement. The coefficients of correlation are far too small to be considered significant.

Scholarship indices were discovered for eighty-eight actors. These were correlated with their corresponding total verbatim percentages which were computed by dividing the verbatim speeches of every characterization by each actor by the total number of speeches recorded by the same actor. This coefficient of correlation was .024, with a probable error of plus or minus .072. So the "total" correlation once again agrees closely with the correlation of the five groups. A mean of verbatim memorization percentages, scholarship indices, coefficients of correlation, and probable errors for the five groups was computed. These means appear in Table XVII as a statistical summary of the relationship between verbatim memorization and educational achievement.

TABLE XVII

SUMMARY OF RELATIONSHIP OF VERBATIM MEMORIZATION PERCENTAGES AND SCHOLARSHIP INDICES

GROUP	MN. VERBATIM PERCENTAGE	MN. SCH. INDICES	COEFF. OF CORRELATION	P.E.
135 +	70.85	71.83	.100	±.124
85-134	71.09	75.61	.073	±.127
39-84	73.16	68.78	−.094	±.120
21-38	73.25	62.84	.086	±.118
10-20	73.24	66.20	.082	±.124
MEAN	72.14	69.05	.051	±.123
TOTAL	72.88	65.45	.024	±.072

Verbatim memorization and experience of the actor. Do experienced actors memorize more exactly than actors with little or no experience? Unfortunately, it was impossible to obtain data on all theatrical experience of the one hundred and five actors who had one or more characterizations in the fourteen recorded productions. It was possible, however, to ascertain in how many productions of the Sycamore Players each actor had appeared previous to the characterization on a recording. Every production book on file in the office of the director of dramatics at Indiana State Teachers College

was carefully examined, and under the name of each of the one hundred and five players included in this study were listed every production in which he had appeared, its date, and the role he had played. In such a manner, the number of previous performances, ranging from zero to ten, was listed opposite each of the one hundred and sixty-nine characterizations of over ten speeches.

The relationship of verbatim memorization and previous experience was then studied by comparing verbatim memorization percentages with their respective number of previous performances in which the actor of that characterization had appeared at the time of the recorded production in question. This information has been tabulated in Tables XVIII, XIX, XX, XXI, and XXII, one table for each of the five groups of characterizations established on the basis of number of speeches.

In the first column was listed the number of the actor; in the second column, the letter of the play; in the third column, the verbatim memorization percentage; and in the fourth column, the number of previous performances in productions of the Sycamore Players. The means, the coefficient of correlation, and the probable error were listed at the bottom.

TABLE XVIII

RELATIONSHIP OF VERBATIM MEMORIZATION AND PREVIOUS EXPERIENCE (135 PLUS)

ACTOR	PLAY	VERBATIM PERCENTAGE	EXPERIENCE
1	G	93.98	1
2	A	93.73	5
3	B	87.88	0
4	B	87.12	0
5	B	84.24	0
6	M	83.96	0
7	E	82.18	1
8	H	80.17	1
9	K	80.00	2
10	A	79.52	2
11	G	78.83	2
12	A	78.50	2
13	E	77.86	7
11	F	75.63	0
9	C	75.33	4
14	I	75.27	4
15	N	74.67	2
16	L	73.42	2
17	G	71.51	2
18	B	71.04	0
19	F	69.32	6
20	B	68.78	0
21	L	64.20	2
16	E	63.52	1
22	K	60.87	1
15	L	60.66	1
8	N	60.57	5
23	N	60.34	7
23	L	54.59	6
18	K	54.39	4
24	G	53.29	4
25	N	48.36	2
26	M	48.31	3
MEAN		71.16	2.39

r -.328 plus or minus .105

TABLE XIX

RELATIONSHIP OF VERBATIM MEMORIZATION AND PREVIOUS EXPERIENCE (85-134)

ACTOR	PLAY	VERBATIM PERCENTAGE	EXPERIENCE
27	B	93.02	2
19	A	90.08	5
28	J	88.64	1
29	H	88.24	0
16	M	88.18	3
30	G	88.00	1
31	B	87.61	0
14	J	86.36	2
32	J	84.54	2
33	C	84.00	1
2	D	82.91	4
34	C	81.90	0
35	B	81.51	2
13	N	80.90	0
36	C	79.79	1
37	A	79.32	0
38	L	78.79	0
39	H	78.70	0
40	H	77.88	0
41	D	77.06	0
3	M	75.00	1
42	A	74.24	6
43	C	72.94	2
44	C	70.18	1
38	M	69.97	1
45	I	69.47	5
46	L	64.46	2
47	B	64.04	1
48	G	61.54	0
18	N	59.63	3
25	M	55.73	3
42	I	45.63	5
49	J	34.07	0
MEAN		75.31	1.64

r -.112 plus or minus .116

TABLE XX

RELATIONSHIP OF VERBATIM MEMORIZATION AND PREVIOUS EXPERIENCE (39-84)

ACTOR	PLAY	VERBATIM PERCENTAGE	EXPERIENCE
17	E	96.15	0
50	G	93.51	2
1	I	92.73	0
51	B	92.68	1
52	D	92.19	0
53	K	91.11	1
54	F	90.20	1
55	B	90.00	1
43	K	88.37	0
56	K	86.59	1
46	D	86.00	0
57	J	86.00	0
9	G	82.14	3
43	G	80.77	1
58	K	79.10	1
9	A	77.78	1
59	H	77.27	0
16	H	76.19	5
12	C	76.19	0
60	M	75.47	0
33	K	74.65	0
36	F	72.46	0
8	E	71.70	2
42	E	70.00	1
61	D	67.65	2
45	J	66.67	3
62	G	66.07	0
42	N	65.52	3
19	D	65.12	4
26	D	55.56	0
63	I	55.41	8
26	N	47.06	2
47	H	37.84	0
63	J	31.71	6
MEAN		75.21	1.44

r -.446 plus or minus .093

TABLE XXI

RELATIONSHIP OF VERBATIM MEMORIZATION AND PREVIOUS EXPERIENCE (21-38)

ACTOR	PLAY	VERBATIM PERCENTAGE	EXPERIENCE
64	H	95.83	1
65	J	94.12	2
66	I	91.18	0
67	B	87.50	3
68	I	87.10	2
69	I	85.29	0
70	I	83.33	0
56	I	82.14	0
71	E	81.82	0
28	I	80.00	2
23	E	78.13	5
72	K	77.78	0
73	H	77.42	0
74	I	74.07	0
63	M	73.68	2
75	H	73.68	0
13	I	72.97	5
13	K	72.73	6
76	E	72.41	0
77	M	71.79	3
5	E	71.43	1
78	E	70.33	2
18	E	69.44	1
79	H	69.23	0
5	N	68.57	2
80	C	68.18	1
78	H	66.67	1
77	N	65.38	2
26	H	64.29	1
35	N	62.86	3
25	H	62.50	1
41	K	61.54	1
81	N	57.58	0
55	L	50.00	2
MEAN		73.96	1.44

r -.064 plus or minus .115

TABLE XXII

RELATIONSHIP OF VERBATIM MEMORIZATION AND PREVIOUS EXPERIENCE (10-20)

ACTOR	PLAY	VERBATIM PERCENTAGE	EXPERIENCE
82	I	100.00	0
83	II	100.00	0
84	II	94.12	2
63	E	93.75	0
77	E	92.31	0
85	E	92.31	0
7	M	91.67	2
7	J	90.00	4
86	E	86.67	3
87	I	85.71	0
88	K	85.71	0
89	I	82.35	0
79	N	81.25	1
90	H	75.00	1
91	J	75.00	1
92	H	75.00	1
93	E	75.00	1
94	J	72.73	2
95	I	72.22	0
12	I	70.59	1
16	J	70.00	10
96	E	70.00	0
97	I	69.23	0
98	J	68.42	0
99	J	64.29	1
100	I	61.54	3
101	I	57.89	0
86	H	56.25	2
12	K	55.56	3
91	K	54.55	1
102	A	54.55	3
103	I	50.00	0
104	E	50.00	0
105	I	40.00	1
42	H	40.00	0
MEAN		72.51	1.26

r -.046 plus or minus .114

The most important information to be observed in the five foregoing tables is that the coefficients of correlation were all negative and all small. It would be entirely justifiable to state that an actor with much experience does not memorize more exactly than one with less experience. But is the reverse true? Not to any great extent. Although the coefficients take a definitely negative trend, they are very small. Only the coefficient of the group of characterizations of from thirty-nine to eighty-four speeches is significant, and even that coefficient is far too small to be termed highly significant. Therefore, it might be concluded that there is a very slight indication that actors with little or no experience in the productions of the Sycamore Players may memorize more accurately than actors with greater experience.

The means of verbatim memorization percentages for the five groups ranged from 71.16 per cent to 75.31 per cent. This would seem to indicate that the size of the role only slightly influences the degree of verbatim representation of the script.

It was significant to note that the means of the number of previous characterizations at Indiana State Teachers College listed in the five foregoing tables decreased as the size of the characterization decreased. Quite understandably, actors with greater experience were apparently given the more lengthy roles.

Table XXIII summarizes the information found in the previous five tables. Included in this table are the mean verbatim memorization percentages, the mean number of previous performances, the coefficients of correlation, and the probable error of each of the five groups. Included also are the means of each of these four columns. The "total" entry at the bottom of the table was computed by finding the total verbatim memorization percentage for each of the one hundred and five actors and correlating those figures with the total number of times that the respective actors had appeared in a Sycamore Players' production. Therefore, the "total" correlation is between verbatim memorization and total experience, not previous experience. The total coefficient of correlation was minus .125, with a probable error of plus or minus .065.

TABLE XXIII

SUMMARY OF RELATIONSHIP OF VERBATIM MEMORIZATION AND EXPERIENCE

GROUP	MN. VERBATIM PERCENTAGE	MN. EXPERIENCE	COEFF OF CORRELATION	P.E.
135 +	71.16	2.39	-.328	±.105
85-134	75.31	1.64	-.112	±.116
39-84	75.21	1.44	-.446	±.093
21-38	73.96	1.44	-.064	±.115
10-20	72.51	1.26	-.046	±.114
MEAN	73.63	1.63	-.199	±.109
TOTAL	72.99	3.13	-.125	±.065

Verbatim memorization and size of role. The fourth problem to be studied in this chapter is the relationship between verbatim memorization and the size of the role. It was noted earlier in the chapter that the range of the mean verbatim percentages for the five different sizes of role groups was very slight, 4.15 per cent. An examination of Table XXIII discloses an interesting pattern in regard to the mean verbatim percentages. Each of the five groups included from thirty-three to thirty-five characterizations, approximately the same number. The range of these means is too

too slight to be conclusive, but the pattern is somewhat regular. The group of characterizations of from eighty-five to one hundred and thirty-four speeches had the most exact memorization; the thirty-nine to eighty-four speeches group was second; the twenty to thirty-eight group was third; the ten to twenty group was fourth, and the group with the most lengthy characterizations had the least exact memorization.

The one hundred and five actors were then placed into seven groups on the basis of the total number of lines they had recorded in all of their characterizations in the fourteen recorded productions. A total verbatim memorization percentage was then computed for each of the seven groups by dividing the total number of verbatim speeches of every actor in each group by the total number of speeches recorded by every actor in the same group.

Table XXIV shows the relationship between the verbatim memorization percentages and the numbers of speeches recorded. The first column places the limits of speeches on the seven groups; the second column lists the verbatim memorization percentage of each group.

TABLE XXIV

RELATIONSHIP OF VERBATIM MEMORIZATION AND NUMBER OF SPEECHES RECORDED

GROUP	TOTAL VERBATIM PERCENTAGE
500	63.10
400-499	71.75
300-399	72.34
175-299	76.99
100-174	75.40
40-99	77.57
10-39	76.55
MEAN	72.99

The group having the most speeches were least exact in their performance of the script. The three groups having the most speeches were below the mean in verbatim percentage; the four groups having the fewest speeches were above the mean. The difference is too slight to be conclusive, but there is a definite indication that the larger roles require additional time, concern, and concentration on the part of the performer, resulting in memorization difficulties.

Verbatim memorization and difference of sex.

A miscellaneous consideration of this study is the relationship between verbatim memorization achievement and the difference of sex. Table XXV reports the findings of this investigation a rather parenthetical inclusion in this analysis. The number of males or females appearing on the fourteen recorded productions is listed in the first column; the number of recorded characterizations of over ten speeches for each sex is listed in the second column; the total number of verbatim speeches is listed in the third; and the verbatim memorization percentage for each sex is listed in the fourth column. Totals or a mean for each column is listed at the bottom of the table.

TABLE XXV

RELATIONSHIP OF VERBATIM MEMORIZATION AND DIFFERENCE OF SEX

GROUP	NO.	CHARACTERI-ZATIONS	TOTAL SPEECHES	VERBATIM SPEECHES	VERBATIM PERCENTAGE
FEMALE	49	71	6244	4676	74.89
MALE	56	98	8221	5882	71.55
TOTAL	105	169	14465	10558	
MEAN					72.99

The female group showed an appreciable superiority in verbatim memorization performance. There is no assurance that this fact indicates that women have a greater ability to memorize. Their achievement in memorization was, however, 3.34 per cent more exact than that of the men. This superiority is probably due, in part, to a keener degree of competition for parts among the women; consequently, they may try eagerly to perform their roles industriously and to reproduce their lines more accurately.

Verbatim memorization and difference of age. The final problem of this chapter is to show the relationship of verbatim memorization performance and the age of the actor. This relationship can be shown only crudely. The large majority of actors in the fourteen recordings were of college-age, between eighteen and twenty-two years. To compare the verbatim memorization percentages of age groups within such a narrow range would be pointless.

However, sixteen of the characterizations were played by actors younger than college-age. Table XXVI compares the verbatim memorization percentages of these juvenile players with those of actors of college-age or older. The number of actors included in each group is shown in the first column; the total recorded speeches of each group are shown in the second column; the total verbatim speeches of each group are shown in the third column; and the verbatim memorization

percentage for each group is shown in the fourth column. The total or mean for each column is given at the bottom of the table.

TABLE XXVI

COMPARISON OF JUVENILE AND COLLEGE-AGE ACTORS' VERBATIM MEMORIZATION ACHIEVEMENT

GROUP	NO.	TOTAL SPEECHES	VERBATIM SPEECHES	VERBATIM PERCENTAGE
JUVENILE	16	1459	1141	76.83
OTHERS	89	13006	9417	72.44
TOTAL	105	14465	10558	
MEAN				72.99

The juvenile group showed an appreciable superiority over the college-age group in respect of verbatim memorization. It cannot be logically supposed that the child or adolescent has superior memorization ability; the measurement of ability and attitude can not be measured in this survey. Their achievement was, however, 4.39 per cent higher than that of the college-age group. It would seem that, in part, this difference was caused by a greater degree of enthusiasm on the part of the juvenile players.

D. SUBJECTIVE INFLUENCES OF VERBATIM MEMORIZATION IN THE THEATRE

It was stated in Chapter I that one of the chief limitations of this study is that some of the most significant factors causing good or bad verbatim memorization are of such subjective nature that they can not be objectively treated. The purpose of this chapter is to examine these factors briefly in order to present a more thorough analysis of verbatim memorization in the Indiana State Teachers College theatre program.

Attitude of the actor. The first of these factors, generally stated, is that of attitude. It appears almost too obvious to be mentioned that an accurate word-for-word presentation of the script depended considerably upon the actor's intention in that regard. The actor who intends to be other than verbatim is all too well known; he is the ad-libber. He thinks that it is clever to rewrite the play during its production. He is usually clever enough to escape any of the dangers of this practice, and he is often personally admired by his audience. However, he causes extreme anguish to the director and considerable uneasiness and tension to the other members of the cast. Furthermore, as was stated before, the play is certain to suffer in unity and effectiveness if the speeches are not presented exactly.

The writer did not personally know all of the one

hundred and five actors who appeared in one or more of the fourteen recorded productions. Therefore, it was impossible for him to determine which of them were the ad-libbers, who intentionally misrepresented their lines, or to what degree. Consequently, it was futile to consider a statistical analysis of the relationship of verbatim memorization to intention of delivering the play verbatim. However, those actors with whom the writer was acquainted and who were notorious as ad-libbers almost invariably achieved low verbatim memorization percentages. Intention or lack of intention to memorize word-for-word almost positively influenced verbatim memorization achievement.

There is another aspect of the actor's attitude which probably influenced verbatim memorization percentages. It is that of industry. An actor may intend to memorize his lines accurately--and never get around to doing it. This type of actor is not an ad-libber by intention but because of laziness or lack of determination and persistence. The actor who is willing to devote considerable time to learning and relearning his lines is almost certain to have a higher verbatim memorization percentage than the actor who is content to learn his lines at the rehearsals. The latter actor may reproduce his lines exactly through some fortunate coincidence, but he is far more likely to be guilty of many errors due to his

uncertainty in his state of quasi-memorization of his role.

A third aspect of the actor's attitude is his professional ambition. It would seem probable that the actor who had ambition of entering the professional, educational, or civic theatre in a serious manner would make a greater effort for accurate memorization than the actor who appeared in college theatre productions as a means of gaining attention or having a good time. Once again, there is no way to prove this contention statistically, for what actor would admit that his purpose in the theatre was not a serious one.

The attitude of the actor, therefore, was probably very instrumental in shaping his verbatim memorization percentage. The degree of this relationship, however, can not be discovered.

Psychological forgetfulness. The second general subjective factor which probably influenced verbatim memorization in this study is that of psychological difficulties. The actor may have had a psychological aversion to a particular word or word sequence. The writer is not an advanced student of psychology, and is, therefore, not qualified to analyze this problem in relation to its effect on verbatim memorization. The opinions of recognized psychologists in the field of memorization are, consequently, briefly stated so that the

study may be a more complete one.

A. A. Brill, M. D., lecturer on psychoanalysis and abnormal psychology at New York University, has this to say about forgetfulness:

> People generally regard forgetting as a common occurrence and I hear a good deal about it from patients, who very often inform me that they are very nervous and that they are forgetting all the time. When I sometimes ask the person to give me an example, he stops and thinks for a long time and then declares that last week he had to do such and such a thing at such and such a place, but forgot. Now imagine a person who is forgetful, remembering what happened last week! In the final analysis there is but one kind of forgetfulness, organic forgetfulness. If one forgets in any real sense of the word he has some organic brain trouble which can be diagnosed by a physician or neurologist in about ten minutes. If there is no organic condition, his so-called forgetting may be ultimately reduced to two causes: first, that he really did not wish to remember what he claims he "forgot"; secondly, that he either never knew it or that he never considered it important enough to know. Eliminating the second factor, we find when we ask ourselves why we have forgotten to do something, that we did not wish to do it, that there was something in that particular act that was unpleasant or disagreeable.[1]

To relate Doctor Brill's argument to this particular study, it can be seen that his second reason for "so-called forgetfulness", that "he never knew it or that he never considered it important enough to know", has been treated earlier in this chapter under the topic of attitude of the actor. Certain actors included in this study did not forget their

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1 A. A. Brill, Fundamental Conceptions of Psychoanalysis (New York: Harcourt, Brace and Company, 1921), pp. 49-50

lines; rather, they were not willing to expend sufficient time and energy to know their lines well enough in the first place. This influence of verbatim memorization was not treated statistically because it would have been impossible to know which of the one hundred and five actors who appeared on the fourteen recordings could be said to fit into this category.

Doctor Brill elaborates on his first reason for so-called forgetfulness, "he really did not wish to remember what he claims he 'forgot'", by stating:

> Thus what we generally look upon as forgetting is not that at all; certain things are merely pushed into the unconsciousness, because of something unpleasant associated with them; we are not aware of them consciously and so we naturally presume we have forgotten them. The mind is always protecting us from pain by pushing whatever is disagreeable and unpleasant into the unconscious . . . We may crowd out something from consciousness, but we never forget it; it always remains in the unconscious.[2]

Relating Doctor Brill's argument to this research, it can be readily seen that many actors will not present their speeches exactly because of an unpleasant association with a particular word or speech or scene; they will claim, and actually believe, that they have forgotten. Perhaps an unpleasant childhood experience or an unpleasant rehearsal incident will cause a scene or portion of a scene to be

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2 Ibid., pp. 74-75

extremely painful to the actor; his mind might easily choose to send the correct words, which were once known, into Doctor Brill's state of so-called forgetfulness, into the unconscious mind.

Edward L. Thorndike, an eminent American psychologist, modifies Brill's theory on forgetfulness by stating:

> Some have argued that if satisfying after-effects strengthen connection whereas annoying after-effects weaken them, we ought to remember satisfying and forget annoying experiences . . . The Law of Effect would not lead us to remember experiences that were pleasant and forget experiences that were painful, but to remember experiences that have been pleasant to remember, and forget experiences that have been painful to remember, a very different matter. To be reminded of the pains of past diseases is an obvious delight to many persons, who describe them with gusto. How far people do recall those matters whose recall gives them satisfaction rather than those whose recall annoys them has not, to my knowledge, been measured. The nearest to such a measurement which I have found is by Zeigarnik, who reports that boys who failed in a crocheting task remembered the task among others which they had done, but that girls who failed often forgot it. Zeigarnik found in general that subjects often forgot those tasks in which they had failed and felt ashamed of failing. Only 32 per cent of such were remembered as compared with a general average of 68 per cent.[3]

Thorndike's corollary to Brill's proposition is presented for two purposes. First, it substantiates more completely what was said earlier in the chapter about the ad-libber. The usually painful experience of forgetting lines was, no doubt,

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3 Edward L. Thorndike, The Fundamentals of Learning (New York: Teachers College, Columbia University, 1932), pp. 458-459.

an experience "pleasant to remember" to the ad-libber. Second, it should be kept in mind that the actual pleasantness or unpleasantness of any experience, by repetition or association, does not serve to cause remembrance or forgetfulness. The most serviceable criterion is that a person is more likely to remember "experiences that have been pleasant to remember, and forget experiences that have been painful to remember."

Franklin J. Shaw[4] recently conducted an experiment in which each one of a group of students was given a list of adjectives alleged to have been prepared by their classmates in description of them. After a period of one week, Shaw tested their recall of these adjectives. He found that in each case, the percentage of errors was smaller when the evaluation made by the alleged rater was favorable.

It is probable that psychological forgetfulness is an important factor in determining the degree of verbatim memorization in the theatre; but it was impossible to determine that degree of influence. In order to measure psychological forgetfulness in a study such as this, the study would have had to have been made by a competent psychoanalyst who would have had to have had an opportunity to examine personally each of the one hundred and five actors included in this study.

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4 Franklin J. Shaw, "Two Determinants of Selective Forgetting", The Journal of Abnormal and Social Psychology, 39:437, October, 1944.

CHAPTER III

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this concluding chapter is to summarize the findings of this study and to suggest studies that would further analyze verbatim memorization in the theatre.

Summary of extent of verbatim memorization. The first problem of this research was to discover the extent of verbatim memorization in the theatre program of Indiana State Teachers College. This was accomplished by comparing fourteen recordings of actual productions by the Sycamore Players with the actual scripts of those plays. A percentage of verbatim memorization was computed for each production. These percentages ranged from 61.63 per cent to 83.15 per cent, and the mean was 73.11 per cent. Nearly three of every four speeches were delivered word for word in the fourteen recorded productions at Indiana State Teachers College which were included in this study.

Summary of nature of non-verbatim memorization. The second problem was to discover the nature of imperfect representations of the scripts. This was done by classifying these imperfections into four groups: substitutions, additions, subtractions, and rearrangements. Substitutions comprised 36.92 per cent; additions, 29.12 per cent; subtractions, 23.09

per cent; and rearrangements, 10.87 per cent of the total non-verbatim speeches.

Summary of verbatim memorization and the rehearsal schedule. The third problem was to learn what relationship existed between verbatim memorization and the rehearsal schedule. It was discovered that very little relationship existed between the number of rehearsals of a play and the verbatim memorization percentage of that play. The coefficient of correlation between those two factors was .168. It was further discovered that there was a significant but small relationship between the number of days from the first rehearsal of a play to its final dress rehearsal and the verbatim memorization percentage of that play. The coefficient of correlation was .409, significant but very slight.

Summary of objective analysis of possible influencing factors on verbatim memorization of the actor. The fourth consideration of this survey was to determine the relationship that existed between verbatim memorization in the theatre of Indiana State Teachers College and such various factors as intelligence, educational achievement, previous theatrical experience (at Indiana State Teachers College), size of role, difference of sex, and age. These various factors were compared with the memorization achievement of the actors and not with their ability to memorize.

There was no significant relationship between the verbatim memorization percentages of characterizations and the percentile scores achieved on the American Council of Education Psychological Examination by the actors who played those characterizations. The characterizations were placed into one of five categories according to the number of speeches of the characterizations. The mean coefficient of the five coefficients of correlation computed, one for each size of role category, was .022, indicating almost no relationship between verbatim memorization percentages and percentile scores.

There was also no significant relationship existing between verbatim memorization performances and the scholarship index of the actor at Indiana State Teachers College. Five coefficients of correlation were computed, one for each category; its mean coefficient was .051, indicating practically no relationship between verbatim memorization and educational achievement.

The mean of the five coefficients of correlation computed between verbatim memorization percentages and the number of previous characterizations in the Indiana State Teachers College theatre program was minus .199. This coefficient is larger than either of the preceding mean coefficients, but it is yet far too small to be termed

significant. It is interesting, however, to note that there is a slight indication that experienced actors did not memorize so exactly as did the less experienced actors.

The mean verbatim memorization percentage of each of the five size-of-role groups was then compared. The group of characterizations of from eighty-five to one hundred and thirty-five speeches had the highest mean verbatim percentage, 75.31 per cent. The thirty-nine to eighty-four group, the twenty-one to thirty-eight group, and the ten to twenty group followed in that descending order. The group of characterizations of one hundred and thirty-five or more speeches had the lowest mean verbatim percentage, 71.16 per cent. The actors were then placed into seven groups according to the number of total speeches they had performed, in one or more characterizations, in the fourteen recorded productions. There was a strong indication that the actor with many speeches does not memorize so exactly as the actor who has fewer speeches. The three groups with the most lines recorded were significantly inferior in memorization performances to the four groups who had fewer lines recorded.

There were two other miscellaneous relationships examined. It was found that the female memorization percentage was 3.34 per cent higher than the male memorization

percentage. It was found also that the juvenile actor's verbatim memorization percentage was 4.39 per cent higher than the percentage of actors of college-age or older.

Summary of subjective influences of verbatim memorization in the theatre. The fifth and final problem of this research was to examine those possible subjective influences of verbatim memorization that could not be examined statistically. The two general influences, attitude of the actor and psychological forgetfulness, were studied in Chapter V.

The attitude of the actor is very probably a significant influence on the memorization performance of that actor. The ad-libber will intentionally reproduce his speeches inaccurately. The lazy actor will not use sufficient time or energy to learn his role; it is not that he forgets his lines but that he has never thoroughly known them. Furthermore, the actor who has a temporary and frivolous interest in the theatre is less likely to memorize his speeches exactly than the actor who has a permanent theatrical interest.

Psychological forgetfullness is a probable reason for errors in regard to verbatim representation of the play. Brill and Thorndike believe that a person remembers experiences that are pleasant to remember and forgets experiences that are painful to remember. Therefore, an unpleasant

association with a word, a speech, or a scene may cause the actor to misrepresent the word or speech, or, temporarily, to forget the word or speech completely.

Final Summary. In final summary, the following conclusions should be noted:

1. Nearly three of every four speeches, or 73.11 per cent, were delivered verbatim in the fourteen recorded productions.

2. The most prevalent type of non-verbatim memorization was that of substitution.

3. There was no significant relationship between verbatim memorization of a production and its number of rehearsals.

4. There was a significant but small positive relationship between verbatim memorization of a production and the number of days in rehearsal of that production.

5. There was no significant relationship between verbatim memorization of the actor and either his intelligence or educational achievement.

6. There was a very slight indication that experienced actors did not memorize as exactly as did less experienced actors.

7. There was a definite indication that characterizations of few speeches were more verbatim than larger characterizations.

8. The memorization percentage of the female sex was 3.34 per cent higher than that of the male sex.

9. The memorization percentage of the juvenile actors was 4.39 per cent higher than that of actors of college-age or older.

10. The attitude of the actor is very probably a significant influencing factor on the memorization percentage of that actor.

11. Psychological forgetfulness is a probable reason for errors in regard to verbatim representation of the play.

Recommendations. Individual voice recordings have become prominent in recent years as a helpful device to be used in speech instruction to improve the pitch, force, rate, voice quality, pronunciation, and other factors of the individual voice. The writer highly recommends that the recording of plays be used to similar advantage. For example, if the play were recorded when the production was in its dress rehearsal stage, the actors could hear the recording before the first presentation of the play; consequently, they should be able to give a more polished interpretation of their individual roles. Listening to the recorded play could have another advantageous effect. It is conceivable that part of the reason why more experienced actors did not memorize exactly was due simply to carelessness; they did not realize that they were making errors. They could not possibly fail to realize the lack of verbatim memorization, however, if they compared their speeches of the recorded play with the script. The use of the recording as a device in the direction of drama should become increasingly frequent.

The purpose of this survey has been to analyze verbatim

memorization in the theatre program of Indiana State Teachers College. Surveys of a similar nature conducted in the theatre programs of other colleges, in the civic or community theatre program, or in the professional theatre would be valuable. It would be interesting to note whether the conclusions of this survey would coincide with those of other surveys of this nature.

This survey has been a general analysis of verbatim memorization. More comprehensive examinations of each of the objective influences of verbatim memorization of the actors would be very helpful to a better understanding of the problems involved in verbatim memorization. An investigation of the relationship of stage fright to exact reproduction of the script might prove both interesting and valuable. Research of an experimental nature that controlled all of the variable factors except one and measured the degree of influence certain factors have on verbatim memorization would provide a more thorough insight into the problems of exact memorization.

The importance of verbatim representation of the written play in effecting good drama is sufficient to warrant thorough investigations into these and other of its problems.

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APPENDIX

A

RECORDED PRODUCTIONS INCLUDED IN THIS STUDY

CODE LETTER	NAME OF PRODUCTION	DATE OF PRODUCTION
A	The Hasty Heart John Patrick	December 19, 1945
B	Out of the Frying Pan Francis Swann	October 29, 1942
C	She Stoops to Conquer Oliver Goldsmith	February 4, 1947
D	Jim Dandy William Saroyan	September 30, 1941
E	Master Skylark John Bennett	December 10, 1942
F	Angel Street Patrick Hamilton	April 2, 1946
G	But Fair Tomorrow Douglass Parkhirst	July 13, 1946
H	Eve of St. Mark Maxwell Anderson	November 12, 1942
I	Stage Door George S. Kaufman Edna Ferber	April 12, 1945
J	Our Town Thornton Wilder	June 1, 1944
K	Snafu Louis Solomon Harold Bachman	February 26, 1946
L	Ladies in Retirement Edward Percy Reginald Denham	January 21, 1943
M	On Borrowed Time Paul Osborn	March 23, 1943
N	Arsenic and Old Lace Joseph Kesselring	March 1, 1943

B

SAMPLE TABULATION SHEET OF ANGEL STREET

CHARACTER	VERBATIM	ADD	SUBTRACT	SUBSTITUTE	RE-AR RANGE	
Mr. Manningham	187	13	20	16	9	58
Mrs. Manningham	220	16	26	9	11	62
Detective Rough	123	6	30	13	4	53
Nancy	50	6	4	7	2	19
Elizabeth	46	1	3	0	1	5
TOTAL	626	42	83	45	27	197