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ABSTRACT

Presented and compared with an earlier study is a survey of socioeconomic and family background and employment success of 59 former students in Oregon secondary classes for the educable retarded. Results of in-depth interviews, employment indexes, and community adaptation schedules (CAS) are reported. The two S groups had similar IQ scores and living arrangements. The earlier group (1968) had more working mothers and more fathers missing from the home and both groups scored below average on the CAS. Other findings reported in the study include less employment success for the 1969 group than for the 1968 group, an inverse relationship between the length of time in special education classes and employment, greater success by program graduates than by dropouts, and no relationship between intelligence level and degree of self-support. Reviewed are results of interviews and work index and CAS scores of the panel (38 Ss from the 1968 study) which demonstrated little change in community adaptation and a wide range of individual differences for the 1-year period. Included in three appendixes are the components of the employment index. (CL)

Rehabilitation Research and Training Center in Mental Retardation

University of Oregon, Eugene

WORKING PAPER NO. 54

SURVEY II: AN INVESTIGATION OF THE ADJUSTMENT OF A SELECTED POPULATION OF MENTALLY RETARDED YOUNG ADULTS IN OREGON

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July, 1971

These papers are intended primarily as informal communications to and among members of the Research and Training Center staff. The materials contained herein are generally not in final stages of refinement and are not intended for public release.

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PREFATORY NOTE

This report includes the second annual interviews with ex-pupils of EMR high school programs in Oregon. The first survey report was issued in January 1970. These surveys have the same research purposes, utilize the same methods and instruments, and include data about ex-pupils from the same Oregon school districts. Survey II includes a "new crop of ex-pupils and re-interviews with some first-survey respondents, who thus constitute a research panel. The analyses made in Survey II are based upon this continuity; comparisons are made within and between populations to learn the effects of a one year lapse of time.

The reader is cautioned not to over generalize the findings of this report. Because the population studied was purposively chosen, i.e. to fulfill a conscious purpose or design, it has none of the technical characteristics of a sample. There was no randomness of selection, thus no statistical inferences can be drawn. Selection of the study population is described in the first section of Chapter II while Chapter III deals with a related problem, that of possible selection bias, by comparing the populations actually interviewed with those originally chosen for inclusion.

The research team is indebted to the Oregon Board of Education whose staff played a large part in making the project possible: Dr. Mason J. McQuiston, Director of Special Programs, Mr. Ray Rothstrom, Coordinator, Mental Retardation; Mr. Terry Kramer and Mr. Don Trumbull, Specialists, Mental Retardation; and Mr. James McAllister, Coordinator, Title VI.

Several staff members of the Oregon R & T Center should be acknowledged as contributors to Survey II. Part of the field work, including lengthy searches for respondents, was conducted by A. Frederick Bahr. Thomas Conley provided reliable computer programming.

Mrs. Alice Saylor, secretary, has labored over the manuscript. A.S. Halpern, Director of Research, made useful suggestions for organizing the material and did some of the editing. H.J. Prehm, Center Director, contributed central id and the necessary enthusiasm to bring the project to fruition.

b e r July 1971

CHAPTER I

BACKGROUND OF THE PROGRAM

Introduction

In our society, "normal" adolescence seems to consist of an unclearly defined timespan between puberty and "adulthood". Many ways and many reasons for lengthening this timespan are found. For example, our technological society requires special abilities and frequent "retooling" to new specialities, thereby extending the period of formal education. This, of course, slows down the transition between adolescence and adulthood.

Those who have been labeled as educable mentally retarded (EMR) must also pass through adolescence into adulthood. In many ways, their problems are no different from those of the so-called "normal" person. And yet their histories have certainly been different, in terms of both the services they receive and the ways in which they are perceived by society at large.

Adults are trying to meet the needs of the EMR via special education classes and other special school services. Work experience programs which include training and trial work placements are provided; these are designed to insert the EMR into the adult work-a-day world as soon as possible. Ironically, if a technological society's economy is slow and jobs are scarce, the person newly integrated into the adult work world may be the one who is excluded first by loss of job. Further, the EMR has few semi-adult places to retreat and escape the "unemployed" category. Although there are limited training programs, there is no Peace Corps, no VISTA, no college. His adolescent adjustment period is truly shortened. He is an immediate potential loser, in more ways

than one. This problem needs study, and this report is a continuing effort to understand the problem.

Oregon Interests in the Problem

Public school programs for the educable mentally retarded in Oregon are offered with financial support provided by the State Legislature as long as programs comply with the law. This law (ORS-343.410-490) requires school districts with 12 or more eligible educable retarded pupils to provide special instructional facilities for all such pupils in the district and establishes standards for the certification of both pupils and teachers.

As part of a school district's program, an agreement may be entered with the Vocational Rehabilitation Department (VRD) which assists students both during and after their high-school years with their vocational training and placement. In those cases where such an agreement does not exist, the school often develops its own work-study program for student training and entrance into a vocation. In either event an individual pupil is, of course, privileged to apply to VRD for individual service.

Obviously, many factors are involved in integrating the educable retarded adolescent into the formal and informal aspects of society. Differences in school and community work programs as well as individual student differences interact to produce many social and vocational outcomes. The Oregon Board of Education (OBE) has expressed continued interest in evaluating the results of their special school programs and have lent continuing assistance to the research efforts.

The Oregon VRD has also given assistance. Most importantly this report required the cooperation of young adults who have been part of the special programs, and their families, who have a personal interest in the evaluation of this sub-system of education and rehabilitation.

Purposes of the Research

This is a report of the findings of a second survey of graduate and drop-out ex-pupils in the special programs throughout Oregon. Survey I was reported in January 1970 and its purposes also pertain to Survey II. The purposes are:[1]

1. To systematically describe a segment of this exceptional population in terms of socio-economic and familial backgrounds;

2. To assess the relationship between different economic and geographic regions of the state and the success of the special program;

3. To inquire into the relative success in the adult world of individuals who formerly were pupils in the special educational and vocational programs.

The emphasis has been on purpose 3 using measures of work success and of adaptation to specific segments of the community as these are defined by the Community Adaptation Schedule.[2] This report has essentially the same emphasis but with the advantage of a larger (combined) group of ex-pupils. The three major community outcome variables remain: 1) work success indicators derived from work histories; 2) an individual's contribution to his expenses; and 3) Community Adaptation Schedule scores.

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1 B.G. Romo, B.J. Spence, & L.J. Prehm, An Investigation of the Adjustment of a Selected Population of Mentally Retarded Young Adults in Oregon. Eugene: College of Education, Dept. of Special Education, January 1970, p.11 (Working Paper Number 22 (unpublished) of the Research and Training Center in Mental Retardation).

2 S.B. Roen and A.J. Burnes. New York: Behavioral Publications, Inc. 1968.

Of major interest in Survey II is the inclusion of a panel of subjects. The panel consists of 3[illegible] students who terminated from high school during the 1967-68 school year and who have been interviewed in both survey years. Analysis of the panel data will demonstrate any changes among the same individuals. It could lead to insights about some of the maturation effects of post-school experiences.

CHAPTER II

RESEARCH PROCEDURES

The population interviewed in Survey I was purposively chosen to meet certain criteria. The research design required the inclusion of differing geographic locations and socio-economic regions, students with and without VRD program experience, both graduates and dropouts, and subjects who had been out of school for one year and for two years.

Fourteen school districts located in three major geographical areas of Oregon were ultimately chosen. It was found that 100 pupils of special secondary EMR classes had terminated in those districts during either of the two academic years 1966-67 or 1967-68 these recent years were chosen because secondary EMR programs produced few graduates prior to that time. Within this time span about 350 secondary pupils terminated from all secondary EMR classes in Oregon (excluding Portland), thus the 100 chosen are 28.5 per cent of the total possible population for those years.

Socio-economic regions of Oregon established in a 1962 Board of Health survey[3] were considered in the selection of districts for two reasons.

1. There is considerable face validity in the claim of intra-regional homogeneity, thereby implying inter-region differences, specifically in occupational fields.

2. The survey made available information regarding the prevalence and characteristics of mental retardation in each region.

In that survey, five geographic regions of Oregon were established with "reasonable homogeneity of topography, climate and economy, with

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3 Mental Retardation Prevalence in Oregon: A Survey by the Oregon State Board of Health, 1962

regional boundaries contiguous with county lines." Natural divisions include the Cascade and Coast Range Mountains. The Valley Region, situated between these ranges, contains the bulk of the state's population exclusive of Portland, a diverse occupational structure, and people of all economic levels. The Eastern Region, comprised of all 17 counties east of the Cascades, is the largest in area, the most sparsely populated and the most limited in range of occupations. The Coastal Region is a somewhat isolated 300 mile strip west of the Coast Range, has few truly urban areas, and an economy based largely on fishing, logging, and tourism. The Southern Region is made up of four mountainous counties in which the forest industry fluctuates widely, workers are quite mobile, and mining and recreation contribute to the economy. These regions generally coincide with the Governor's Administrative Districts in Oregon and data for this population can also be reported in the framework of the Administrative Districts (see map at the end of this chapter).

The Coastal Region was largely omitted from this study because the Board of Health survey showed it to have a high proportion of educable retardates in regular classes; since population density is low, it is probable that special classes are difficult to organize and to justify budgetarily. Instead, two districts which the Board of Health classified as Coastal were included under a new heading, Southwestern. In addition, the city of Portland was excluded because its population size makes it unique in the state and because similar research has been initiated in that city.

The regions presented in this report have been labeled North Valley, Central Valley, and Southwestern and East. (See Appendix A) Selection of school districts within these socio-economic units was based on a district's potential to provide ex-pupils, which meant the district had to offer secondary level special education classes in several prior years. The final group of young people, then, had experienced up to thirty months of interaction in the adult community, presumably within different environments, by the time they were interviewed in Survey I.

Names of potential respondents were located in the files of the OBE. A form was completed for each pupil giving basic data used in certification, such as intelligence level, age and grade at certification, and residence. A blank copy of this form was mailed to school districts requesting more recent data. The school districts furnished last-known addresses and a letter was sent to each ex-pupil briefly explaining the research and asking cooperation.

Survey II followed essentially the same procedures to obtain names of the 1969 high school terminations in the same school districts. In addition to this new group, those who terminated in 1968 were to be contacted for a second interview so that a research panel design might give added information. Three interviewers (on part-time bases) conducted the interviews during a two and one-half month period in the summer of 1970. Not all potential respondents could be located or were willing to participate and this, of course, may introduce a bias to the data which will be considered in the analysis.

Research Instruments

Interview Schedule.

The questions asked in Survey I were asked again in Survey II. The interviewers were trained to probe for a fully detailed answer to each item. The general topics covered in the interview were: family membership, ages, work history of parents and respondent, jobs held by siblings, educational level of all members, living arrangement, and proportion of living expenses which the respondent provided for himself.

Two measures of success are derived from the interview information. One is the contribution to expenses made by the respondent. By discerning as accurately as possible the proportion of living expenses contributed by the ex-pupil, a percentage estimate of self-support can be used as an indicator of independence in the adult world. The second is named the Employment Index.

Employment Index:

A refinement over last year's survey report is a change in the Work Index as reported in Survey I; "number of employers" has been removed from the formula and it has been renamed the Employment Index. Since components of both indexes were obtained in the first data collection, the revised first year data will be compared with Survey II data in Chapter V. Mathematically, the Employment Index is defined as:

$$\text{Employment Index} = \frac{A + \frac{B}{2}}{D} \quad \text{where,}$$

A= Total months of full-time employment since termination from secondary school
B= Total months of part-time employment since termination from secondary school
D= Total number of months in the labor market.

Any time respondents spent in military service or the Job Corps was treated as part-time work and its importance accordingly reduced. The rationale for this decision disclaims membership in the armed services as employment in the community, which is the concept relevant to this index. While a quasi-contract for services does exist in the military, it is not one which requires mutual satisfaction between employer and employee, in the usual occupational sense. Enlistment in the Job Corps is also considered marginal on the grounds that it does not constitute competitive employment in its full meaning.

The time female respondents spent as housewives was subtracted from the total months in the labor market (D). Also subtracted from D were months ill or injured and months in additional training.

Community Adaptation Schedule:

A principle instrument chosen for use in this research is the Community Adaptation Schedule (CAS) by Roen and Burnes (1968). The CAS consists of 217 items which produce scores in six major headings or chapters:

1) Work Community
2) Family Community
3) Social Community
4) Larger Community
5) Commercial Community
6) Professional Community

The chapters are subdivided into 33 subsections. Each chapter is composed of from 17 to 49 items to be answered if the subsections are relevant to each respondent's situation. According to the authors,[4]

....the CAS was devised in an attempt to provide the necessary means of empirically discovering substance in, and understanding of, a person's life style within his community. Thus, both practical and theoretical needs determined the content of the CAS. It was intended that the CAS furnish valuable data for effective diagnosis, treatment, programming, and assessment of clinical intervention gains. In addition, information provided in response to the CAS could permit analyses to be made that are highly relevant in determining the scope and intensity of psycho-social disruptions for particular populations.

4 S.R. Roen and A.J. Burnes, Community Adaptation Schedule Preliminary Manual, P. 1

Boen and Burnes administered the CAS to several exceptional populations and found that it differentiated, at a significant level, between those populations and 'normals'. However, the CAS had no known utility for EMR persons its use was largely exploratory.

Field Methods

Contacting the Respondents

Initial contacts in the 14 districts for Survey I were made with the directors of special education and teachers of the EMR during the summer of 1969. These contacts were renewed during the summer of 1970. The research records show a total of 132 ex-pupils were sought in 1970 for either an initial or repeat interview. Of the 49 panel prospects first interviewed in 1969, a total of 38 re-interviews were obtained; in nine cases the interview was with a family member but 29 ex-pupils also completed the CAS a second time. A total of 82 names were received as 1969 high school terminations. Three of these were found to be ineligible because they had not yet terminated from high school. Of the remaining 79 prospects, 59 interviews with the ex-pupils or a family member were obtained. The CAS was answered if the ex-pupil was available. Six of the 79 students refused to participate and 14 could not be located. Table 1 shows the geographic distribution and year and type of termination of the actual study population for both surveys.

TABLE 1

ACTUAL STUDY POPULATION BY REGION OF STATE, WITH YEAR AND TYPE OF TERMINATION

	Year of Termination							
	1967		1968		1969		Totals	
Region	Drop	Grad	Drop	Grad	Drop	Grad	Drop	Grad
North Valley	1	7	5	12	3	20	9	39
Central Valley	1	8	1	8	4	10	6	26
Other Valley	-	-	1	2	5	2	6	4
Southwest	-	-	2	5	3	2	5	7
East	2	3	5	8	3	7	10	18
Totals	4	18	14	35	18	41	36	94

Special Techniques:

Payment of five dollars per respondent was used as an incentive. Mention of this often increased willingness of respondents and members of their families. Since the complete process required about two hours of the respondent's time, the payment seemed equitable.

The CAS was administered via small portable tape player, with the respondent also following the printed questions. This method, which was

developed in a pilot study, reduced reading problems greatly.[5] The respondent was instructed to interrupt the taped voice at any point, since there is no time element involved in the CAS, and to ask for clarification of questions. The taped voice was the same in all cases, and clarifications were limited to substitution of single words in a second reading aloud of the question by the interviewer.

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5. The effect of reading ability on responses is unknown. However, ten pairs of identical items are included in the CAS as a measure of respondents' consistency of response. The Roen and Burnes consistency measure is simply the mathematical average of differences in answers to the ten pairs of items. This population compares to some other groups studied by the authors of the CAS as follows:

Roen and Burnes	
Professionals	0.75
Psychiatric outpatients	0.85
Psychiatric hospital patients	1.02
This population	
High IQ (70 or above)	1.38
Lower IQ (69 or less)	1.79

The range of possible values of the consistency score is 0.00 to 5.00

CHAPTER III

CHARACTERISTICS OF POTENTIAL AND ACTUAL POPULATIONS

Survey research is often confronted with some bias in the selection of its participants. An audit becomes important to judge how closely the population actually interviewed compares with the population originally selected for interviewing with regard to general background characteristics that are known about both populations. In this chapter, possible biases in the selection of respondents will be examined. The limited data for the potential populations are compared first. Next the two actual populations of 1968 and 1969 are compared, then the potential is compared with the actual population for each of these years. Some of the attributes to be compared involve pupil certification, intelligence level, and VRD service histories. Only small differences are found in these comparisons.

The present distinction between potential populations and actual populations must be specified. First, as mentioned in Chapter II, all special class pupils who had terminated in 1967, 1968 and 1969 from the school districts chosen for study at the time of the first survey are designated as the potential populations. For Survey I, 33 ex-pupils from the 1966-67 school year and 67 ex-pupils from the 1967-68 school year were identified. The survey II potential population included 79 ex-pupils from the 1968-69 school year for these same districts.

Some ex-pupils could not be located or refused to be interviewed. Those who were actually interviewed are here called the actual populations. The number of ex-pupils in the actual populations are:

1966-67 school year, 22; 1967-68 school year, 49, and 1968-69 school year, 59.

Comparison of potential and actual populations for the same year of termination shows few differences. For both 1968 and 1969 ex-pupils, the actual population was slightly older at scheduled time of interview and slightly more were rural residents than among potential populations. There were somewhat fewer school drop-outs among the 1969 actual population as compared with the potential population of the same year.

Only the data obtained from certification records in the office of the Oregon Board of Education and the Vocational Rehabilitation Department's master client list are available for the total potential populations. These include date of birth, date of certification, school grade at certification, measured intelligence level, type of termination from school, urban-rural residence, source of referral for certification, source of referral to VRD, and status of VRD referral.

Other data gathered in interviews are available for the actual populations. These include descriptive data about family members, education and occupations of parents, work history of each respondent, his contribution to daily expenses, and answers to the Community Adaptation Schedule. Descriptive data are presented in Chapter IV while work history, contribution, and CAS answers appear in the remainder of this report as dependent, or outcome, variables.

It has been decided to omit the 1967 population from the comparisons presented here. The disproportionate size of that population is the basic reason for the decision. The 1968 and 1969 potential

populations are similar in size (N=67 and N=79 respectively), which allows for a more valid comparison than with the 1967 population (N=33). The possibility of combining the Survey I population for this report (adding 1967 and 1968 terminations together) was ruled out because this combination would confound the findings with the effect of an additional year of maturation in the 1967 population.

The effect of the selection process on the 1969 ex-pupils was nil in the following respects: the 1969 potential population was nearly the same as the 1969 actual population for the characteristics of age at certification, school grade at certification, and time elapsed between certification and termination, i.e. number of months in special education classes (see Table 2).

The effect of the selection process among 1968 ex-pupils was more variable on these three characteristics. Average age at certification for the 1968 potential population was one year <u>older</u> than for the 1968 actual population. Further, the 1968 potential population was certified one-half school grade <u>earlier</u>, on the average, than the 1968 actual population and the potential population spent nearly one-half year <u>less</u> total time in special education classes (see Table 2). The importance of these differences as source of bias is open to conjecture.

TABLE 2

CHARACTERISTICS OF POTENTIAL AND ACTUAL POPULATIONS FOR TWO YEARS OF SCHOOL TERMINATION

	1968				1969			
	Potential		Actual		Potential		Actual	
	Mean	Range	Mean	Range	Mean	Range	Mean	Range
Age at scheduled time of interview in months	236.2	197-270	238.6	212-270	234.1	197-258	237.0	210-258
Age at certification, in months	157.3	82-240	145.1	82-240	152.5	83-233	151.2	83-233
School grade at certification	6.1	1-12	6.8	2-12	5.3	1-12	5.4	2-12
Time elapsed,* certification to termination, in months	64.5	2-145	70.0	6-145	68.7	3-138	70.8	3-132
(N's)		(67)		(49)		(79)		(59)

* 12 month year.
N's varies for each computation in the cells of this table due to missing data of some categories; the N shown is the total possible for each sub-population.

There is only one large difference (shown in Table 3) with regard to type of school termination and level of intelligence. It is the larger proportion of school dropouts among the 1969 potential population; however, the actual populations for the two years are strictly comparable. There is a small difference in intelligence scores between the two years, but the actual populations are comparable to the potential populations in each year. There is no relationship (data not shown here) between number of months in special education class and intelligence level.

TABLE 3

INTELLIGENCE LEVEL AND TYPE OF SCHOOL TERMINATION OF POTENTIAL AND ACTUAL POPULATIONS FOR TWO YEARS OF SCHOOL TERMINATION
(REPORTED IN PERCENTS)

	1965		1969	
	Potential	Actual	Potential	Actual
	INTELLIGENCE LEVEL			
High Intelligence (70 and above)	52	50	57	56
Lower Intelligence (69 or less)	48	50	43	42
(*N=)	(62)	(48)	(77)	(57)
	TYPE OF SCHOOL TERMINATION			
High school graduate	71	73	65	73
School drop-out	29	27	35	27
(*N=)	(66)	(49)	(77)	(55)

*N fluctuates due to a minimal amount of unknown data for either or both variables, for each ex-pupil.

Academic failure was the major reason for referral to the special class, as could be expected. This reason was specifically mentioned in the certification referrals of 88 per cent of the 1968 potential population and 88 per cent of the 1968 actual population. It was specifically mentioned in the certification referrals of 75 per cent of the 1969 potential population and 76 per cent of the 1969 actual population. There is a difference between years but the potential and actual populations are identical in each year.

On the urban-rural dimension, a little more than one-half of each of the populations lived in a rural area (population of less than 11,000, see Appendix A). Of the 1968 ex-pupils, 54 per cent of the potential population were rural residents and 59 per cent of the actual population were rural residents. Of the 1969 ex-pupils, 55 per cent of the potential

populations were rural residents and 56 per cent of the actual population were rural residents. Thus, there is little difference between years although a few more rural residents are included in the actual population in each year.

Referrals to VRD are shown in Table 4. The proportion of persons referred who were accepted for VRD service appears to have increased somewhat for 1969 ex-pupils over 1968 ex-pupils. More of the 1969

TABLE 4

VRD REFERRALS OF POTENTIAL AND ACTUAL POPULATIONS FOR TWO YEARS OF SCHOOL TERMINATION

	1968				1969			
	Potential Number	Per Cent	Actual Number	Per Cent	Potential Number	Per Cent	Actual Number	Per Cent
Referred and served	32	48	22	45	43	54	34	58
Referred, not served	16	24	12	24	9	11	6	10
Not referred	19	28	15	31	27	34	19	32
Totals	67	100	49	100	79	99	59	100

actual population were referred and served (received services), while the proportion referred but not accepted for services (closed at intake) decreased. There are similar changes in the potential populations, although not as great. Although these differences between years are evident, the potential and actual populations within years are comparable in proportions referred, served, and not referred.

A substantial increase in the cooperative working relationships between schools and the VRD is illustrated by Table 5. Within these populations, more referrals of EMP persons to VRD came from schools in 1969, compared with 1968. Within each year of school termination, the potential and actual populations are alike in the proportion referred to VRD by school personnel.

TABLE 5

SOURCE OF REFERRAL TO VRD FOR POTENTIAL AND ACTUAL POPULATIONS AND FOR TWO YEARS OF SCHOOL TERMINATION

	1968				1969			
	Potential		Actual		Potential		Actual	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Referred to VRD								
by school	28	42	20	41	45	57	34	58
other sources	20	30	14	28	7	09	6	10
Not referred to VRD	19	28	15	31	27	34	19	32
Totals	67	100	49	100	79	100	59	100

Data in Table 6 indicate a relationship between receipt of VRD service and completion of school. Virtually all of the 1968 ex-pupils referred to and served by VRD were graduates whereas only about one-half of those referred but not served by VRD were high school graduates. The 1969 ex-pupils show a greater proportion of dropouts among those served by VRD. As to intelligence level, VRD served equal proportions of high and lower intelligence persons among the 1968 potential and

TABLE 6

VRD SERVICE HISTORIES OF POTENTIAL AND ACTUAL POPULATIONS FOR TWO YEARS OF SCHOOL TERMINATION BY TYPE OF TERMINATION AND INTELLIGENCE LEVEL

	1968						1969					
	Referred and Served		Referred, Not Served		Not Referred		Referred and Served		Referred, Not Served		Not Referred	
	P*	A*	P	A	P	A	P	A	P	A	P	A
Graduate	30	21	9	7	8	8	29	26	5	3	13	11
Drop-out	2	1	7	5	10	7	11	7	4	3	10	5
Unknown	0	0	0	0	1	0	3	1	0	0	4	3
Totals	32	22	16	12	19	15	43	34	9	6	27	19
High (70+) Intelligence	15	10	7	5	10	9	25	20	4	3	15	10
Lower (69-) Intelligence	16	11	9	7	5	3	16	12	5	3	12	9
Unknown	1	1	0	0	4	3	2	2	0	0	0	0
Totals	32	22	16	12	19	15	43	34	9	6	27	19

P= potential population, A= actual population

actual populations, but a larger proportion of high than lower intelligence persons among 1969 potential and actual populations. This is partially explained by the five percent increase in proportion of high level intelligence persons in the latter year, as was seen in Table 3.

Summary

There are slight differences between the two potential populations. The 1969 potential population includes somewhat more ex-pupils in the high intelligence level, had somewhat more referrals accepted by VRD

and more referrals to VRD by school personnel, in comparison with the 1968 potential population.

Similar small differences exist between the two actual populations. The 1969 actual population has somewhat more ex-pupils in the high intelligence level, more referrals accepted by VRD, more referrals to VRD made by school personnel, and fewer referrals "closed at intake" by VRD.

The actual population of 1968 does differ from the potential population of 1968 in ways which an educator could best interpret. The actual population was certified one year younger but one-half school grade later and spent one-half year longer in special education classes. This is the strongest instance of possible selection bias among the participants in this survey.

CHAPTER IV

COMPARISON OF 1968 and 1969 ACTUAL POPULATIONS

In this chapter some individual and family characteristics relative to the 1968 and 1969 actual populations will be examined. As will be recalled, some data were obtainable from only those ex-pupils (or their families) who were actually available for interview. The background variables to be contrasted include intelligence, living arrangement, marital status, vocational rehabilitation referrals, sex, and medical problems (related to mental retardation). In addition, some information about responses to the Community Adaptation Schedule will be presented. The family structure, age of parents at time of respondent's birth, educational level of respondent's parents, and the major economic activity of parents will also be used to more adequately describe the home environment of the actual populations.

Some Individual Characteristics of Respondents:

Perhaps one of the most relevant descriptive variables is that of intelligence. The scores to be reported, however, are from certification records in the OBE office and originate from a wide range of tests and testing conditions. Since these intelligence scores have been combined in this report as if all were administered with one instrument at the same time, the result concerning intelligence scores should be regarded with caution.

TABLE 7

INTELLIGENCE SCORES OF 1968 AND 1969 ACTUAL POPULATIONS

	1968 Actual Population	1969 Actual Population
Mean	69.2	70.8
Range	52-88	54-95
Mode	77,78	75
(N=)	(48*)	(59)

* Records incomplete for one individual

The ex-pupils who were actually interviewed from termination years 1968 and 1969 are contrasted in Table 7. On the basis of the range of intelligence scores, the 1969 ex-pupils have a wider distribution, and when the modal scores are considered, the 1969 ex-pupils are slightly lower with a mode of 75. In contrast, the scores of the 1968 ex-pupils are bi-modal at a slightly higher level. The mean scores of the two groups are nearly equal.

In the "high" and "lower" intelligence level dochotomy presented in Chapter III, 50 per cent of the 1968 actual population had intelligence scores of 69 or less, 50 per cent had scores of 70 or above. Of the 1969 actual population, 42 per cent had scores of 69 or less and 58 per cent had scores of 70 or above.

One of the commonly used indicators of personal independence is the living arrangement of an individual. The members of these actual populations had been out of school for one year (on the average, longer for some dropouts). Table 8 shows little difference between the two actual populations in their living arrangements. The smaller proportion

of the 1969 actual population living with parents is explained by the larger proportion living in organizational housing and, therefore, is not an indication of greater independence.

TABLE 8

LIVING ARRANGEMENT OF INDIVIDUAL MEMBERS OF THE 1968 AND 1969 ACTUAL POPULATIONS (REPORTED IN PER CENTS)

Living arrangement	1968* (N=48)	1969 (N=59)
Alone	04	02
Parents	75	64
Roommates in apartment or house	02	03
Spouse	10	02
Spouse at parents or in-laws	00	09
Military, Job Corps, YWCA, SRF**	08	15
Other (e.g. friends)	00	05
Totals	99	100

* Datum missing for one individual.
** Salem Rehabilitation Facility is live-in sheltered workshop, although some residents may choose to live in the community.

Six of the 49 ex-pupils in the 1968 actual population were recorded as married, one divorced, and two each had one child. Six of the 59 ex-pupils in the 1969 actual population were married and, as of interview time, two children were born to those interviewed.

Vocational Rehabilitation Department referrals are not proportionately different between the two actual populations. A total of 40 of 59 (68 per cent) of the 1969 actual population had been referred to VRD at some time. A total of 34 of 49 (69 per cent) of the 1968 actual population had also been a VRD referral. The

difference is in the proportions accepted for service by the agency and the reader may wish to refer to Table 4, page 18 for details.

Other general characteristics of interest include: sex ratio, 59 per cent males among the 1968 actual population, 56 per cent males among 1969 actual population; and medical problems accompanying retardation, 26 per cent among 1968 actual population and 19 per cent among 1969 actual population. The latter information is from the physician's statement included in pupil certification records.

Some Family Characteristics of Respondents

In general, the 1969 ex-pupils had one more sibling per family, who was more likely to be a girl. However, respondent's rank in birth order was nearly the same, on the average, for 1968 and 1969 actual populations: number three. Table 9 reports some family characteristics.

TABLE 9

FAMILY CHARACTERISTICS OF THE 1968 AND 1969 ACTUAL POPULATIONS

	1968			1969			
	Mean	SD	Range	Mean	SD	Range	Number
Number of brothers	2.3	1.7	1-7	2.2	1.5	1-6	85
Number of sisters	2.0	1.1	1-5	2.5	1.2	1-6	90
Total siblings	3.6	2.3	1-10	4.8	2.6	1-11	106
Respondent's rank among siblings	2.9	2.2	1-10	2.8	1.8	1-9	107
(Total possible N=)		(49)			(59)		(108)

Age of parents at time of respondent's birth is also a family characteristic of interest. Essentially, there is no difference between populations exceeding 0.6 years, on the average. The mean age of fathers at the time of respondent's birth was 32.2 years for the 1968 actual population and 32.8 years for the 1969 actual population. The mean age of mothers at this child's birth was 27.4 and 27.9 years for the two populations, respectively (see Table 10).

TABLE 10

AGE OF PARENTS AT TIME OF RESPONDENT'S BIRTH, FOR 1968 AND 1969 ACTUAL POPULATIONS

At time of respondent's birth:	1968 Mean	1968 SD	1968 Range	1969 Mean	1969 SD	1969 Range	Number
Father	32.2	8.9	18-57	32.8	7.6	20-49	96
Mother	27.4	6.8	16-41	27.9	7.5	15-56	101
(Total possible N=)		(49)			(59)		(108)

The education attained by 185 parents of respondents, by year of respondent's termination from high school, appears in Table 11. The educational level of the total parent group is seen to be low, as more than one-half of the parents failed to complete high school.

TABLE 11

EDUCATION OF PARENTS OF THE 1968 AND 1969 ACTUAL POPULATIONS (REPORTED IN PER CENTS)

	1968		1969	
Grade Level	Father	Mother	Father	Mother
Grades 0 through 7	20	14	18	19
Grade 8	26	18	25	23
Grades 9 through 11	15	25	20	23
High school graduate	26	36	29	26
Some College	03	02	02	07
College graduate or more	10	05	06	02
(N=)	(39)	(44)	(49)	(53)

Major economic activity of parents is recorded in Table 12. The largest percentage difference is reflected in the larger proportion of mothers of the 1968 population who were employed at the time of the interview. Fifty-two per cent of those mothers were working while 34 per cent of the mothers of the 1969 actual population were working. This is associated with the larger fraction of fathers "not in the home" of the 1968 actual population. Those respondents who terminated from high school in 1968, then, had experienced a greater loss of fathers and, accordingly, a larger proportion of their mothers had assumed a dual role. Unemployed or retired fathers, for the actual population of each year of termination, are nearly identical percentages.

TABLE 12

MAJOR ECONOMIC ACTIVITY OF PARENTS OF THE 1968 AND 1969 ACTUAL POPULATIONS
(REPORTED IN PER CENTS)

	1968		1969	
Status	Father	Mother	Father	Mother
Employed	56	52	63	34
Unemployed	12	00	14	02
Retired	06	00	05	02
Vocational Training	02	00	00	00
Housewife only	-	46	-	56
Not in home*	22	00	12	02
Unknown	00	00	07	05
Totals	98	98	101	101
(Total possible N=)	(49)		(59)	

Note: totals ranging from 98 to 101 per cent is a normal variation due to rounding.

* Not in home includes parents who are deceased, divorced, separated or runaway.

Community Adaptation Schedule (CAS):

A general indicator of relative "success" in the community is the comparison of answers given to this schedule of items measuring adaptation in the community. Responses to the CAS are scored on a numerical scale from 1.00 to 6.00, with the higher values indicating greater adaptation. Individual and group scores are simple mathematical averages. Average chapter scores for the two actual populations are reported in Table 13 along with the norm established by the authors of the CAS.

The rank order of these scores shows only one slight difference between the actual populations: Family Community is highest (4.35) and Social Community second highest (4.28) for the 1969 actual population; the order is reversed in these chapters for the 1968 actual population (Social is 4.47; Family is 4.27). With respect to mean scores, the differences are rather small although the two EMR actual populations appear to be somewhat "less adapted" than the normative population. (see footnote to Table 13)

TABLE 13

CAS 'MEAN' CHAPTER SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS AND 'MEAN' SCORES OF NORMATIVE GROUP USED BY THE AUTHORS* OF THE COMMUNITY ADAPTATION SCHEDULE

CAS Chapter	Norm*	1968	1969
Work	4.28	3.97	3.98
Family	4.52	4.27	4.35
Social	4.50	4.47	4.28
Larger Community	4.16	3.61	3.58
Commercial Community	4.14	3.80	3.80
Professional Community	3.67	3.44	3.49

* From Roen and Burnes, Community Adaptation Schedule Preliminary Manual New York, Behavioral Publications, Inc., 1968 p.8 The authors derived normative scores by administering the CAS to a group of "well adapted" persons, although their manual does not adequately describe the procedure. The CAS has not been normed for EMR individuals. Problems of reading ability and consistency of answers in the study populations are briefly reported in Chapter II, page 12 above.

Summary

Comparison of the actual populations of 1968 and 1969 reveals nearly equal intelligence levels, the 1968 population being slightly higher and bimodal. There are no differences in living arrangement or marital status. Identical proportions of each population had been referred to VRD, but a larger proportion of 1969 referred ex-pupils had been accepted for service by VRD. Sex ratio favoring males is 1.4 for 1968 and 1.3 for 1969 populations. The 1969 population had one more sibling, on the average, and the 1968 population had considerably more working mothers and more fathers missing from the home. Mothers of the 1969 population were more likely to be

school dropouts. There was no difference in ages of mothers or of fathers. The CAS did not differentiate the two populations, but both populations are less adapted to their community than the group on which the CAS was normed.

CHAPTER V

SOME YOUNG ADULT PERFORMANCES IN OREGON's LABOR MARKET

A focus on occupational outcomes and work histories is important for a combination of reasons. First, this specific aspect of adult adjustment receives emphasis in many of the special programs for the EMR in Oregon school districts. Second, simple and fundamental indicators of occupational success are available whereas any measure of "social success" has few, if any, objective indicators.

It is probable that the young adult EMR is very susceptible to fluctuations in the labor market. The data of this chapter imply that such is the case. Data which demonstrate a downward trend in employment between June 1969 and June 1970, both nationally and in Oregon, will be found in Appendix C. In Appendix C, a possible analogy of young adult EMR persons to young adult non-white persons is drawn. If the reader finds that analogy tenable, the employment data of Survey II imply that special program training helps to delay the effects of economic fluctuations (data for 1968 ex-pupils) but loses its value as the employment picture grows worse (1969 ex-pupils, whose unemployment rate was similar to that of young adult non-whites, Appendix C).

Work Histories:

The most obvious evidence in Table 14 is the large disparity in employment for the two populations being investigated.

TABLE 14

OCCUPATIONAL STATUSES OF 1968 AND 1969 ACTUAL POPULATIONS ONE YEAR AFTER HIGH SCHOOL TERMINATION

Status	1968* Number	1968* Per Cent	1969# Number	1969# Per Cent
Employed (full-time)	28 (22)	57 (44)	17 (13)	29 (22)
Unemployed	10	20	27	46
Housewives	5	10	2	03
School or training	3	06	8	14
Military	3	06	5	08
Totals	49	99	59	100

* Data pertain to June 30, 1969
\# Data pertain to June 30, 1970

The data for employed-unemployed is almost the inverse for those leaving high school in 1969 when compared with employment data for 1968 ex-pupils. The data in Table 14 were collected at two points in time (June of 1969 and June of 1970) in order to equalize the maturational or experience factors. (These same points in time are presented in Appendix C.) The numbers of each group were (generally) 12 months out of school when this "snapshot" was taken.

The unemployed 1969 ex-pupils were mostly classifiable as actively looking for work; only two individuals were convalescing. The working group consisted of mostly full-time employees (13 of 17) at time of interview, but none held jobs above the semi-skilled level. The 1968 working group includes a similar proportion of full time employees (22 of 28) and two individuals whose jobs were in the white collar category.

Sources of jobs are shown in Table 15. Word-of-mouth information about jobs, through relatives or friends, had receded in importance for the 1969 ex-pupils.

TABLE 15

MOST RECENT SOURCE OF JOBS FOR 1968 AND 1969 ACTUAL POPULATIONS

Source	1968	1969
Relative or friend	11	4
Applied in person	7	7
Teacher or VRD Counselor (post-high school)	3	5
Work Experience Program	3	0
Oregon State Employment	2	3
Other	4	1
Unknown	1	3
Totals	31*	23*

* These totals agree with Table 14 only if this additional information is known: one 1969 respondent in "School or training" was in Job Corps, thus a "source" could be recorded; a source can also be recorded for those in "Military". These numbers plus "Employed" total 31 in 1968 and 23 in 1969.

A further look (see Table 16) at what has happened, occupationally, to these young adults since leaving high school reveals 43 individuals, of the 1969 ex-pupils, reported to have held at least one job during the year preceding the interview. These 43 ex-pupils held 87 jobs, for a two job per year average. Of the 43, about one-third held only one job at some time during the one year period. The other two-thirds experienced job turnover, one individual having worked at six jobs.

TABLE 16

TOTAL NUMBER OF JOBS HELD SINCE HIGH SCHOOL TERMINATION BY 1968 AND 1969 ACTUAL POPULATIONS (INCLUDES PRESENT JOB)

Number of jobs	1968*	1969#
One	25	15
Two	7	18
Three	4	6
Four	2	3
Five	0	0
Six	2	1
Totals	40	43

* Data pertain to June 30, 1969
\# Data pertain to June 30, 1970

Of the 1968 ex-pupils, 40 claimed in June of 1969 to have been employed during the preceding year; they reported 71 different jobs. Twenty-five of the 40 (two-thirds) held only one job in the interval. The data of Table 16 show the 1968 ex-pupils to have experienced less job turnover, especially in terms of those who had held one job only. The 40 past-or-present job holders among 1968 ex-pupils are

82 percent of the actual population who worked at some time during that year, while the 43 job holders among 1969 ex-pupils are 73 per cent of the actual populations who worked on at least one job during 1969.

No data on job turnover among "normal" young adults are available. However, entry level occupations for both normal and EMR young adults are said by labor analysts to be transitory occupations while such work as clerical, which is stable, appears to be difficult for the EMR young adult to attain (see Appendix C).

Employment Index Components:

It is of interest to compare these two groups of ex-pupils with regard to the average values of the component factors used in computing individual indexes of employment. (described in the second section of Chapter II). Of the 1968 ex-pupils, 32 individuals participated in 245 months of full time work (average 7.7 months) while, of the 1969 ex-pupils, 32 individuals participated in 181 months of full time work (average 5.6 months). Seventeen 1968 ex-pupils participated in 118 months of part-time work (average 7.0 months) and 25 who terminated in 1969 participated in 135 months of part-time work (average 5.4 months). Thus the 1968 ex-pupils experienced a higher level of employment, as a group, during their first year out of school than have the 1969 ex-pupils. Again, the twelve month period involved in these calculations is different for the two groups of ex-pupils. (See Appendix B)

The time periods (work years) reported above are: July, 1968 through June, 1969 (1968 ex-pupils); and July, 1969 through June, 1970

(1969 Ex-pupils). Thus it appears to be the case that the work year 1968-69 was the "best" of the two years for recent terminations from the special class program for EMR pupils. Factors in the general economy would be a prime explanatory reason, since the 1969 ex-pupils have been shown to be similar to 1968 ex-pupils in characteristics which are thought to be important to the social adjustment of EMR persons. A general picture of recent economic fluctuations is shown in Appendix C while the similarities of the two populations of Survey II are covered in Chapter IV, pp. 22-31.

Employment Index Scores:

Survey I included two measures of work outcome: (1) the Work Index and (2) each respondent's contribution to his living expenses. The first measure has been revised, as mentioned earlier, to more accurately account for variation in the worker's job situation and is called an Employment Index. The Employment Index differs from the contributuion score by measuring job activity over the time span the worker was in the labor market. The contribution score, on the other hand, is a point-in-time measure of a respondent's work status at the time of interview. June 30 was selected as the end of a "work year" and as the date to record Contribution to Expenses, to equalize the data. Therefore, two different employment pictures could emerge, theoretically.

The Employment Index is a ratio of full-time jobs, part-time jobs, and amount of time in the labor market, which includes looking for a job. Not all persons were available for work for the same period

of time during a work year, but this occurred somewhat infrequently. Respondents of the 1968 and 1969 termination years are assigned individual scores based upon interview data for their first year after school termination.

In the following analysis, three empirically derived levels of the Employment Index are used. A high Index score ranges from 0.50 to 1.00. The middle level Index score is defined between 0.20 and 0.49. The low level Index score includes all those below 0.20, but excludes anyone who was not in the labor market, that is, any not working or actively seeking work.[5] Table 17 describes the actual populations for two years of high school termination--each one year into the world of work.

The main focus of attention is on the 1969 ex-pupils, but contrasts with respondents of the 1968 year will be made. Since the Employment Index is revised, new scores have been calculated for the earlier interviews. Thus the following tables and text represent a descriptive guideline of trends that pertain to those educable mentally retarded who were in the labor market, who granted interviews, and who left high school in 1968 or 1969.

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5. Six of the 1969 ex-pupils were not in the labor market. Of these, three had decided to return to school, two were kept from the market by health conditions, and one female was not looking for work for personal reasons. Three were high school graduates, two had intelligence scores of 70 or above, five had received VRD service. Time in special classes ranged from 28 to 101 months. Two are male, four are female.

TABLE 17

EMPLOYMENT INDEX SCORES OF 1968 AND 1969 ACTUAL POPULATIONS FOR THEIR FIRST YEAR IN THE LABOR MARKET

Employment Index	1968 Number	1968 Per Cent	1969 Number	1969 Per Cent
High Index score (0.50 to 1.00)	31	66	24	45
Middle Index score (0.20 to 0.49)	6	13	12	23
Low Index score (0.00 to 0.19)	10	21	17	32
Totals	47*	100	53*	100

* Eight respondents had not been in the labor market. The two 1968 ex-pupils became housewives upon leaving school. The six 1969 ex-pupils are described in the preceding footnote, page 38.

The approach generally used to comment upon the following tables is to discuss the frequencies in each table that seem to reflect the largest differences between the two populations. However, other observations are sometimes added, and the reader may find still more. Whenever possible, observed frequencies are preserved and per cents are entered in tables when the group size is 30 or larger. When smaller groups are involved, only frequencies are presented in order to avoid misleading interpretation of per cents based on small numbers. Tables showing low frequencies are likely to have a number of possible interpretations since trends are more difficult to find when the numbers of observations are small.

Using the three levels of Employment Index, Table 17 tends to corroborate the decrease in employment success for the 1969 ex-pupils

that was brought out earlier in Table 15. The 1969 ex-pupils had proportionately fewer high Index scores. A large contrast shown is the five-to-one ratio of high scores over middle scores for the 1968 group, while there is a two-to-one ratio of high to middle scores for the 1969 group.

Other information, not derivable in Table 17, is available concerning the extreme values of the Employment Index. Among the 1968 actual population, nine males and five females have perfect (1.00) Index scores and seven females have scores at the opposite extreme (0.00). Among the 1969 actual population, three males and no females have perfect(1.00) Index scores and five males and five females have scores at the opposite extreme (0.00).

A cross tabulation of sex and level of Employment Index is presented in Table 18. The most obvious difference between the

TABLE 18

EMPLOYMENT INDEX SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS BY SEX AND THEIR FIRST YEAR IN THE LABOR MARKET

	1968		1969	
Employment Index	Males	Females	Males	Females
High Index scores (0.50 to 1.00)	22	9	15	9
Middle Index scores (0.20 to 0.49)	3	3	6	6
Low Index scores (0.00 to 0.19)	4	6	10	7
Totals*	29	18	31	22

* These are the same 100 individuals reported in Table 17.

1968 and 1969 ex-pupils is a decrease in high level Index scores for males. While more than two-thirds (22 of 29) of the 1968 male ex-pupils had high Index scores, the proportion was slightly less than one-half (15 of 31) for the 1969 male ex-pupils. The 1969 females also had proportionately fewer high Index scores than did 1968 females, but the reduction was not nearly as great as among males.

Table 19 shows the relationship between Employment Index and ex-pupils' level of intelligence, when the latter is dichotomized as test scores of 69 or below and of 70 or above. The intelligence score used was always the most recent score prior to certification which meant that pupil's age at the time of the test administration varied due to individual differences in time of certification. To the extent that these figures are valid, they show more 1969 than 1968 ex-pupils to have higher IQ scores. But, judging by the data of Table 19, higher levels of intelligence did not result uniformly in higher levels of employment. Of the 1968 group, an ex-pupil with an intelligence score of 70 or above had a greater chance of earning a high level Index score (N=18) as opposed to the combined middle and low level scores (N=6). For the 1969 ex-pupils, however, 13 held high Index scores versus a total of 18 with lower level Index scores. Thus, the advantage of a higher intelligence score in obtaining a high Employment Index score was seemingly lost for 1969 ex-pupils. The intervening factor is again thought to be general economic fluctuations, as reported in Appendix C.

TABLE 19

EMPLOYMENT INDEX SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS BY INTELLIGENCE LEVEL, FOR THEIR FIRST YEAR IN THE LABOR MARKET

	1968		1969	
	Intelligence level		Intelligence level	
Employment Index	69 or below	70 or above	69 or below	70 or above
High Index scores (0.50 to 1.00)	13	18	10	13
Middle Index scores (0.20 to 0.49)	4	2	4	8
Low Index scores (0.00 to 0.19)	5	4	6	10
Total*	22	24	20	31

* Intelligence scores are not available for one "high" and two "low" Index scores, thus total N is three less than in Table 17.

The geographic areas of North Valley (industrial), Central Valley (semi-agricultural), and the combination of Southwest and East (agricultural) are cross tabulated with Eomployment Index Scores in Table 20. (See Appendix A for districts included in each region.) A finding in last year's report was that ex-pupils of the EMR program in the South-west and East geographic regions "did best on the (Work) Index." Among the 1968 ex-pupils of those regions 16 of 19 in the labor market earned a high Employment Index score. This level was not maintained by the 1969 ex-pupils--only seven of 15 earned high scores. A partial explanation of this difference may lie in the fact that more of the 1969 ex-pupils from this region were school dropouts than was the case for the 1968 ex-pupils.

TABLE 20

EMPLOYMENT INDEX SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS BY GEOGRAPHIC REGION*, FOR THEIR FIRST YEAR IN THE LABOR MARKET

Employment Index	NORTH VALLEY 1968	NORTH VALLEY 1969	CENTRAL VALLEY 1968	CENTRAL VALLEY 1969	SOUTHWEST & EAST 1968	SOUTHWEST & EAST 1969
High Index Score (0.50-1.00)	11	13	3	2	16	7
Middle Index Score (0.20-0.49)	3	3	1	4	1	5
Low Index Score (0.00-0.19	3	6	5	7	2	3
Totals*	17	22	9	13	19	15

* Five respondents are unclassifiable in these geographic regions, thus total N is five less than in Table 17. Three had "high", one "middle", and one "low" Index scores.

Three intervening variables that may have some effect upon the Employment Index score also need to be considered. The first intervening variable is service by the Vocational Rehabilitation Department (VRD). Data relevant to this factor are presented in Table 21. Of those ex-pupils who were in the labor market and therefore could be given an Employment Index score, nearly three-fourths of the 1968 ex-pupils (35 of 47) and nearly two-thirds of the 1969 ex-pupils (35 of 53) had received or been referred for VRD services. Looking at the proportion of high Index scores for each of the served, referred but not served, and not referred groups, it is apparent that the 1969 ex-pupils of all groups show a decline in Employment Index level from that which was earned by the 1968 ex-pupils. The degree of decline however was proportionately less for those receiving VRD services than for those who did not receive such services.

TABLE 21

EMPLOYMENT INDEX SCORES OF 1968 AND 1969 ACTUAL POPULATIONS BY VOCATIONAL REHABILITATION DEPARTMENT SERVICE, FOR THEIR FIRST YEAR IN THE LABOR MARKET*

Employment Index	Year of Termination 1968	1969	Totals Number	Per Cent
		Received VRD Services		
High	15	16	31	61
Middle	2	7	9	18
Low	5	6	11	21
Total	22	29	51	100
		Referred but not Served		
High	7	1	8	45
Middle	3	1	4	22
Low	2	4	6	33
Total	12	6	18	100
		Not referred to VRD		
High	9	7	16	52
Middle	1	4	5	16
Low	3	7	10	32
Total	13	18	31	100

* Eight respondents had not been in the labor market. They are reported in footnotes to Table 17 and on page 38.

The amount of time spent in special education classes by each individual is a second intervening variable which could influence the Employment Index. Table 22 looks at this relationship. The downward trend from 1968 to 1969 which has previously been noted is also seen in this comparison. For those with either less than four years

TABLE 22

EMPLOYMENT INDEX SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS BY LENGTH OF TIME IN SPECIAL EDUCATION, FOR THEIR FIRST YEAR IN THE LABOR MARKET

	Time in Special Education					
	Seven Years and More		Four to Less than Seven Years		Less Than Four Years	
Employment Index	1968	1969	1968	1969	1968	1969
High Index Score (0.50-1.00)	9	7	8	10	13	7
Middle Index Score (0.20-0.49)	2	7	3	3	1	2
Low Index Score (0.00-0.19)	4	8	5	5	0	4
Totals*	15	22	16	18	14	13

* Date of certification is not available for one "high" and one "low" Index score, thus total N is two less than in Table 17.

or seven and more years of special education, the 1968 ex-pupils had a substantially higher ratio of high Index scores than did the 1969 ex-pupils. This was especially true for those with less than four years of special education where the ratio changed from 13 of 14 for the 1968 ex-pupils to 7 of 13 for the 1969 ex-pupils.

Focusing specifically on length of time in special education classes also discloses a trend which suggests that those who are in special classes for a shorter period of time are more likely to be successful. For both the 1968 and 1969 ex-pupils, the proportion of high Index scores is consistently higher for those with less than four years of special classes when compared to those with seven and more years of special classes. One possible explanation of this phenomenon is that those who are certified later are more socially competent, and thus more employable.

A third intervening variable to consider is the type of termination from high school-- graduate or dropout--for its effect on a respondent's job future. In general, the result seems to be quite clear--graduates out-performed their dropout counterparts. This is true for both the 1968 and the 1969 ex-pupils in spite of the fact that, once again, an overall decline was observed between the two years. The data for this comparison are found in Table 23

TABLE 23

EMPLOYMENT INDEX SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS BY TYPE OF SCHOOL TERMINATION, FOR THEIR FIRST YEAR IN THE LABOR MARKET

	Graduate		Dropout	
Employment Index	1968	1969	1968	1969
High Index Score (0.50-1.00)	25	19	6	4
Middle Index Score (0.20-0.49)	4	8	2	4
Low Index Score (0.00-0.19)	6	10	4	5
Totals*	35	37	12	13

* Three respondents terminated the Oregon special class program by transferring out, thus are not reportable here. One was "high" and two "low" on the Index; total N of Table 23 is three less than in Table 17.

Contribution to Expenses:

The respondent's Contribution to Expenses score is an indicator of self-sufficiency. It is a one-point-in-time measure of how well each individual has succeeded in earning his own way. There will be some relationship to the Employment Index since the ability to earn one's way is directly related to employment status.

Contribution to Expenses scores have been empirically classified as follows: a high score means the respondent was earning 100 per cent of his expenses on June 30 of either interview year. A middle score indicates the respondent earned from 50 to 99 per cent of his expenses. A low score indicates the respondent earned 49 per cent of his expenses or less, including those in complete dependence upon family, agency, or other sources.

Examination of Table 24 shows some increase of low Contribution to Expenses scores for the 1969 ex-pupils in contrast to the 1968 ex-pupils, with a complementary decrease in high Contribution scores. The distribution of Contribution scores by sex (data not presented) shows 1969 females were most frequently earning a low proportion of their expenses. Males (N=34) for the same year have a bimodal distribution: the extremes of high (N=13 or 41%) and low (N=15 or 47%) characterize the males.

TABLE 24

CONTRIBUTION TO EXPENSES SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS, FOR THEIR FIRST YEAR IN THE LABOR MARKET*

	1968		1969	
Contribution Score	Number	Per Cent	Number	Per Cent
High Contribution score (100%)	20	43	17	32
Middle Contribution score (50 to 99%)	9	19	9	17
Low Contribution score (00 to 49%)	18	38	27	51
Totals*	47	100	53	100

*Eight respondents were not in the labor market. They are reported in footnotes to Table 17 and on Page 38.

Examination of the realtionship between intelligence level and Contribution to Expenses found these two variables to be basically unrelated to each other. There also was a lack of relationship between geographic region and Contribution to Expenses.

The relationship between receipt of VRD services and an individual's contribution to his own expenses is reported in Table 25. Of the 100 ex-pupils interviewed from the two termination years, 47 received VRD services, 21 were referred but not served, and 32 were not referred to VRD. The proportion of VRD referrals accepted for service increased from 18 of 33 referrals for 1968 ex-pupils to 29 of 35 referrals for 1969 ex-pupils.

TABLE 25

CONTRIBUTION TO EXPENSES SCORES FOR 1969 AND 1969 ACTUAL POPULATIONS, BY VOCATIONAL REHABILITATION DEPARTMENT SERVICE* AND BY RESPONDENTS' YEAR OF HIGH SCHOOL TERMINATION

Contribution	Year of Termination 1968	1969	Totals Number	Per Cent
	Received VRD Services			
High	8	8	16	34
Middle	2	7	9	19
Low	8	14	22	47
Total	18	29	47	100
	Referred but not Served			
High	5	0	5	24
Middle	4	1	5	24
Low	6	5	11	52
Total	15	6	21	100
	Not Referred to VRD			
High	7	8	15	48
Middle	3	1	4	13
Low	4	8	12	39
Total	14	17	31*	100

* One respondent who scored high on Contribution to Expenses was unclassified in VRD records.

No strong relationship can be found between VRD status and contribution to expenses for the 1968 ex-pupils. The proportions of high, middle, and low contribution scores were similar for those who received VRD services, those referred but not served, and those not referred. The proportions for the 1969 ex-pupils, however, were not nearly as consistent. Those not referred to VRD seemed to be performing best, followed by those referred and served, followed by those referred and not served.

Interpretation of Table 25 requires an awareness of two distinct processes which are each reflected in the data: (1) the referral process is activated, to a large degree, by non-VRD persons while (2) the decision to accept a referral is entirely the responsibility of VRD staff. Although the point is moot, it is possible to interpret Table 25 as evidence that both processes have worked reasonably well for these ex-pupils: one-half of those not referred to VRD made high contributions to expenses, lending confidence to the non-VRD referral network; one-fourth of those referred but not accepted by VRD staff made high contributions, which could mean that three-fourths were not amenable to habilitation; and one-third of those who were accepted by VRD staff made high contributions, which could indicate the true success rate of VRD services if the non-need and non-habilitativeness of the other two categories is an accurate portrayal. The entire argument culminates in the last point which involves the implicit assumption that ex-pupils accepted and served by VRD were in fact helped, to demonstrate this conclusively would require a comparison ("control") group and such a group is methodologically unattainable.

Length of time in special education as an intervening variable is presented in Table 26: the decline from 1968 to 1969 is also evident here, especially for those who received less than four years of special education. As was true with the Employment Index, there is a slight tendency for ex-pupils who experienced lesser amounts of special education to be making larger contributions to their own expenses. This trend was stronger for the 1968 than for the 1969 ex-pupils.

TABLE 26

CONTRIBUTION TO EXPENSES SCORES FOR 1968 AND 1969 ACTUAL POPULATIONS BY LENGTH OF TIME IN SPECIAL EDUCATION* AND BY YEAR OF SCHOOL TERMINATION

Contribution	Year of Termination 1968	1969	Totals Number	Per Cent
Seven Years and More in Special Education				
High	4	8	12	32
Middle	2	4	6	16
Low	9	10	19	51
Totals	15	22	37	99
Four through Six Years in Special Education				
High	7	6	13	38
Middle	4	2	6	18
Low	5	10	15	44
Totals	16	18	34	100
Less than Four Years in Special Education				
High	9	3	12	43
Middle	2	3	5	19
Low	3	7	10	37
Totals	14	13	27	100

* Date of Certification missing for two respondents.

The last intervening variable to be considered is type of high school termination-- graduate or dropout. No relationship was found between this variable and contribution to expenses.

Summary

The purpose of this chapter has been to examine more closely, via two work-related measures, some descriptive intervening variables relating to work adjustment of EMR young adults. Since two years of survey data have been collected, it was possible to compare data for 1968 ex-pupils with data for 1969 ex-pupils.

When the Employment Index is used as a criterion measure, the following tentative findings emerge:

1. 1969 ex-pupils achieved lower Employment Index scores than those of 1968 ex-pupils.

2. Males slightly outperform females in obtaining high Index scores.

3. Although higher intelligence is positively related to higher Index scores for 1968 ex-pupils, this relationship does not hold for 1969 ex-pupils.

4. The most favorable geographic area for EMR young adults changed from Southwest and East (1968 ex-pupils) to a virtual tie with the North Valley (1969 ex-pupils).

5. There was a trend toward fewer high Index scores for both clients and non-clients of VRD among 1969 ex-pupils although the degree of decline was less for VRD clients than for non-clients.

6. Basically, early diagnosis (i.e., youth with seven or more years in special education) was not found to be related to high Index scores. The data suggest instead that lesser amounts of special education are associated with greater employment. It is possible that those who are diagnosed later are generally more competent.

7. Graduates of either year of termination tend to outperform dropouts.

When the Contribution to Expenses score is used as a criterion measure, the following tentative findings emerge:

1. 1969 ex-pupils achieved lower Contribution to Expenses scores than those received by 1968 ex-pupils.

2. Intelligence, as a descriptive variable, was not related to this criterion.

3. Geographic area was not a differentiating variable.

4. Females were more likely to be low contributors and males were bimodal: either high or low contributors with few middle contribution scores.

5. Involvement of VRD showed mixed findings in relationship to contribution levels. For 1968 ex-pupils, no strong relationship was evident. Of 1969 ex-pupils, those not referred to VRD were performing best (proportionately), followed by those who received VRD services, followed by those referred to VRD but not served. It was suggested that two selection processes are operating here to screen out both the best and the worst candidates for VRD services.

6. There was again a tendency for those who received lesser amounts of special education to achieve higher levels of self-support. This trend was stronger for the 1968 than the 1969 ex-pupils.

7. Type of termination (graduate or dropout) was not related to level of contribution, contrary to the result that was found with respect to the Employment Index. (the data are not shown in this report.)

The most pervasive result throughout the entire analysis is the decline in employment level and economic self-sufficiency that occurred among 1969 ex-pupils. This trend was manifest throughout most of the data when stratified by other independent and intervening variables. The most plausible explanation for these results is the decrease in employment in Oregon and the nation that occurred between June 1969 and June 1970. The reader is referred to Appendix C for evidence of that decrease and that the mentally retarded are among the most vulnerable members of the labor force. It is possible that attempts to improve the life chances of EMR young adults can be only minimally effective when the economy is slowed.

CHAPTER VI

THE PANEL

Thirty-eight of the 1968 ex-pupils who were reported in the preceding chapters answered the same interview questions after a one year lapse of time, i.e., constitute a panel. Of the 1968 actual population, 78 per cent (38 of 49) were re-interviewed.

Panel data are superior to that of polls or surveys because the panel design permits the identification of changes transpiring over time within the same individuals. The comparison of survey data, such as presented in earlier chapters of this report, identifies differences in sub-populations of various characteristics but cannot identify internal changes over time. The chief disadvantage of the panel design is attrition of members, for example the 22 per cent loss of respondents for this panel in one year. Attrition is inevitable and often biases the findings.

Comparison with Larger Populations:

The comparison made in Table 27 is an informal (non-statistical) test for bias in this panel. Selected information about panel members is compared with data on the 1968 actual population from which the panel was drawn and also with data on the combined 1967,1968, and 1969 actual populations. Six "positive" attributes are listed first, followed by three "negative" attributes. The "positive" attributes for comparison are derived from evidence that a more favorable outcome, after high school, will result for males who are in the higher intelligence range, who have completed high school, who live in a

rural community, who are stable (married), and who have received VRD assistance. Three disabling, or allegedly negative, attributes are medical problems accompanying retardation, a history of school drop-outs in the family, and receipt of public funds through agencies.

TABLE 27

SOME ATTRIBUTES OF PANEL MEMBERS COMPARED WITH THE 1968 ACTUAL POPULATION AND THE ACTUAL POPULATIONS OF THREE TERMINATION YEARS COMBINED (REPORTED IN PER CENTS)

Attribute	Panel (N=38)	1968 actual population (N=49)	Three-Year actual population (N=130)
Male	58	61	55
Higher intelligence*	46	58	55
High school graduate	82	73	71
Rural residence	68	54	53
Married	26	26	12
VRD referral	63	63	65
Medical problems	28	24	19
Dropout siblings	39	30	32
Agency assistance	16	12	05

* Scores of 70 or above at time of certification.

A smaller proportion of the panel are of the high intelligence level (scores of 70 or more) but they exceed the comparison populations in proportion of high school graduates and in proportion of rural residents. The panel members are also higher in each of the negative attributes; two of these (medical problems and agency assistance) are probably associated with low mobility and hence with availability for interview. The higher incidence of dropout siblings, when considered in light of the high rate of high school completion among panel members, is somewhat remarkable and may mean an unusual tenacity among panel members to achieve, at least in school.

In total, these positive and negative attributes of panel members may balance out one against the other; it is nevertheless well to be aware of the directions in which the panel is dissimilar to the larger populations from which it was drawn. Other characteristics of panel members are presented in the following four tables, which can be compared with data in earlier sections of this report. Table 28 shows panel members and the 1968 potential population to be essentially the same in age at certification and at interview, to have been certified at the same grade (sixth) on the average, and to have spent approximately the same number of months in special classrooms (certification to termination).

TABLE 28

CHARACTERISTICS OF PANEL MEMBERS COMPARED WITH 1968 POTENTIAL POPULATION

	Panel (N=38)			1968 (N=67)		
	Mean	SD	Range	Mean	SD	Range
Age at (first) interview in months	238.8	unk.	212-267	236.2	13.6	197-270
Age at certification, in months	160.8	42.1	82-219	157.3	36.4	82-240
School grade at certification	6.2	3.0	2-12	6.1	2.8	1-12
Time elapsed, certification to termination in months*	67.0	35.7	6-145	64.5	35.5	2-145

* 12 month year.

Table 29 reveals selected family characteristics of the panel to be very similar to those of the actual population for the same year of termination, with the possible exception that both father and mother were about a year younger at respondent's birth, on the average.

TABLE 29

FAMILY CHARACTERISTICS OF PANEL MEMBERS COMPARED WITH 1968 ACTUAL POPULATION

	Panel (N=38)				1968 (N=49)			
	Mean	SD	Range	Number	Mean	SD	Range	Number
Number of brothers	2.3	1.7	1-6	28	2.3	1.7	1-7	38
Number of sisters	2.0	1.1	1-5	31	2.0	1.1	1-5	41
Total siblings	3.3	2.3	1-11	38	3.6	2.3	1-10	47
Respondent's rank among siblings	2.7	1.9	1-8	38	2.9	2.2	1-10	48
Age of father at respondent's birth	30.8	9.4	18-57	36	32.2	8.9	18-57	57
Age of mother at respondent's birth	26.6	6.5	16-41	38	27.4	6.8	16-41	53

For some unknown reason, panel attrition has biased the panel toward families with mothers of better education. In Table 30 the fathers of panel members are shown to be of nearly identical education to fathers of the 1968 actual population. For mothers of panel members the findings are quite different: 47 per cent are school dropouts and this is 10 per cent fewer dropout mothers than was characteristic of the 1968 actual population.

TABLE 30

EDUCATION OF PANEL MEMBERS' PARENTS COMPARED WITH PARENTS OF 1968 ACTUAL POPULATION (REPORTED IN PER CENTS)

	Panel (N=38)		1968 (N=49)	
Grade level	Father	Mother	Father	Mother
Grades 0 through 7	19	06	20	14
Grade 8	29	08	26	18
Grades 9 through 11	16	33	15	25
High school graduate	26	44	26	36
Some college	00	03	03	02
College graduate or more	10	06	10	05
Totals	100	100	100	100

There are no differences of consequence between the panel and 1968 actual population shown in Table 31. Essentially the same proportion of panel fathers were employed and panel mothers were housewives at time of interview. The high proportion of employed mothers of the 1968 terminations, shown earlier in Table 12, is about the same for panel members.

TABLE 31

MAJOR ECONOMIC ACTIVITY OF PANEL MEMBERS' PARENTS COMPARED WITH PARENTS OF 1968 ACTUAL POPULATION
(REPORTED IN PER CENT)

Status	Panel (N=38)		1968 (N=[illegible])	
	Father	Mother	Father	Mother
Employed	60	47	[illegible]	[illegible]
Unemployed	08	03	[illegible]	[illegible]
Retired	08	00	[illegible]	[illegible]
Vocational training	03	00	[illegible]	[illegible]
Housewife	-	50	-	[illegible]
Not in home*	21	00	[illegible]	[illegible]
Unknown	00	00	[illegible]	[illegible]
Totals	100	100	[illegible]	[illegible]

* Not in home includes parents who are deceased, divorced, separated or runaway.

In summary, the panel members appear to be somewhat less intelligent, to be more often high school graduates and rural residents, and to have better educated mothers. Very slight differences are found in average time in special classes and age of parents at respondent's birth. All other characteristics are seen to be essentially equivalent for panel members and the population from which they are drawn.

Changes in Work Histories

There is evidence in Table 32 and Table 14 that the effects of the recent economic slowdown in Oregon were lessened, for the EMR, if he had previously been successful in the labor market. (Appendix C presents labor statistics for the two months compared here.) About 13 per cent fewer of the panel were employed in 1970, and more panel members had to be satisfied with part-time work (37 per cent full-time became 24 per cent). The proportion unemployed increased by one-half and there was little or no change in other categories. These data, however, should be compared with earlier tables. The panel members' employment status in 1969 was nearly identical with the 1968 actual population in June 1969 (Table 14), but the 1969 actual population was much less employed in June of 1970 than were the panel members in June 1970. In other words, the loss of jobs for panel members was not as severe as the problems of more recent pupils (1969) in obtaining or retaining employment.

TABLE 32

PANEL MEMBERS' OCCUPATIONAL STATUSES AT ONE YEAR AND TWO YEARS AFTER HIGH SCHOOL TERMINATION

	One Year (June 1969)		Two Years (June 1970)	
	Number	Per Cent	Number	Per Cent
Employed	21	55	16	42
(full-time)	(14)	(37)	(9)	(24)
Unemployed	8	21	12	32
Housewives	4	11	6	16
School or training	3	08	2	05
Military	2	05	2	05
Totals	38	100	38	100

Table 33 shows 26 panel members held a job in June 1969 and 20 panel members held a job in June 1970. Word-of-mouth information about jobs, through relatives or friends, did not recede in importance for panel members in the intervening year.

TABLE 33

SOURCE OF CURRENT JOB FOR PANEL MEMBERS AT ONE YEAR AND TWO YEARS AFTER HIGH SCHOOL TERMINATION

	One Year (June 1969)	Two Years (June 1970)
Relative or friend	10	10
Applied in person	5	6
Teacher or VRD Counselor, post-high school	2	0
Work Experience Program	3	1
Oregon State Employment	2	0
Other	4	3
Unknown	0	0
Totals	26*	20*

* Includes school or training and military; excludes housewives and unemployed.

Thirty-two panel members reported they had held at least one job during the first post-school year; this dropped to 29 individuals in the second post-school year (Table 34). The job-per-year average is nearly identical (1.8 first year, 1.7 second year) but the proportion of panel members experiencing job turnover was somewhat higher in the second post-school year. Thirty-one per cent held more than one job in the first year, whereas 41 per cent held more than one job in the second year. The 32 job holders in the first year are 84 percent of the panel while the 29 job holders in the second post school year are 76 per cent of the panel.

TABLE 34

NUMBER OF JOBS HELD BY 38 PANEL MEMBERS IN FIRST AND SECOND POST-SCHOOL YEARS

	First Year (July 1968 to June 1969)	Second Year (July 1969 to June 1970)
One	22	17
Two	5	9
Three	1	0
Four	1	3
Five	2	0
Six	1	0
Totals	32	29

Changes in Employment Index Scores:

Table 35 shows little change, in the one-and two-year comparison, in average proportions of panel members in the labor market, or in group scores on the Employment Index. This is in sharp contrast to the decrease in level of Employment Index that was observed for the 1969 ex-pupils when compared to the 1968 ex-pupils (see Table 17), probably because the latter comparison is of two distinct groups of people. Some of the differences in the two kinds of data in Table 35 is due to labor market status being recorded as of June 30 of each year while the Employment Index score is a composite of data over a 12 month period.

TABLE 35

EMPLOYMENT STATUS AND EMPLOYMENT INDEX SCORES OF PANEL MEMBERS AT ONE YEAR AND TWO YEARS AFTER HIGH SCHOOL TERMINATION

	One Year (June 1969)				Two Years (June 1970)			
Status	M	F	Total	Per Cent	M	F	Total	Per Cent
In labor market	17	12	29	76	20	8	28	74
Not in market	5	4	9	24	2	8	10	26
Employment Index*								
High Index score (0.50 to 1.00)	14	6	20	67	16	4	20	65
Low Index score (0.00 to 0.49)	5	5	10	33	6	5	11	35

* The formula for this Index is found on page 8 of this report.

Concealed in the group Index proportions are certain change factors. When the two annual Index scores of each individual are compared, it is found that 52 per cent of panel members showed no

change, i.e., were in the same category of Index scores for both post-school years. Twenty-one per cent of panel members had higher Index scores in their second post-school year. Twenty-six per cent of panel members had a lower Index score in their second post-school year.

A small comparison of these changes in Index scores is possible. The 1967 actual population, though their number is few, can be used as a pseudo-panel. They were interviewed in June 1969 but their work histories were obtained for the two years they had been out of school. These data (not shown here) have been re-calculated to derive separate Employment Index scores for the two years (July 1967 through June 1968; July 1968 through June 1969). Because the number of cases available is small for the 1967 ex-pupils (N=17), no firm conclusions are drawn but the data do seem to suggest that the changes in 1967 respondents were more favorable than the changes in the panel one year later. Once again the inclination is to attribute this difference to economic changes during this period. Again, the reader is referred to Appendix C. Two alternative explanations are possible: that the panel members' social and vocational skills deteriorated in the one year period;

TABLE 36

COMPARISON OF EMPLOYMENT INDEX SCORES FOR SECOND POST-SCHOOL YEAR, PANEL MEMBERS AND 1967 ACTUAL POPULATION (REPORTED IN PER CENTS)

	Higher Index Score	No Change	Lower Index Score
1967 Actual Population (N=17)	35	53	12
Panel members (N=31)	21	52	26

or that development of other school-vocational programs produced job candidates who displaced the EMR ex-pupils. The first alternative is least likely since the data for the 1967 pseudo-panel are quite different while the chief difference between the groups compared 1967 respondents and panel members) is the different calendar year which elapsed between the two Index measurements. The second alternative explanation, development of new programs and thus of job competitors, would have an effect which is closely related to the unfavorable employment picture, which this report contends is the prime explanatory factor.

Changes in Contribution to Expenses:

Respondents' contributions to expenses are shown in Table 37. In contrast to the comparison that was just reported with respect to Employment Index scores, there was a decline in level of self-sufficiency for panel members during the second year. This is related to a decrease in full-time employment (Table 32) and, perhaps, to inflation in the general economy. Again, the degree of change is concealed in group scores. 47 per cent of panel members showed no change in Contribution to Expenses, 21 per cent made a greater contribution in their second post-school year, and 32 per cent made a lesser contribution in the second year.

TABLE 37

PANEL MEMBERS' CONTRIBUTION TO EXPENSES AT ONE YEAR AND TWO YEARS AFTER HIGH SCHOOL TERMINATION
(REPORTED IN PER CENTS)

Proportion Earned	One Year (June 1969)	Two Years (June 1970)
High (100%)	50	34
Middle (50 to 95%)	16	18
Low (40% or less)	21	26
No contribution	13	21
(N=)	(38)	(38)

Changes in Community Adaptation Schedule (CAS):

Group average scores for chapters of the Community Adaptation Schedule (CAS) based upon two administrations of the CAS to panel members, are shown in Table 38. The range of possible scores for the CAS is 1.00 (least favorable) to 6.00 (most favorable). There are no major changes in the rank ordering of CAS chapter scores, from most to least favorable. Numerical differences in average scores at the two points in time are small (from 0.00 to 0.22). Commercial Community shows the greatest change (+0.22), Social Community second (-0.18), and Larger Community third but not as great (-0.10).

TABLE 38

CAS MEAN CHAPTER SCORES FOR PANEL MEMBERS AT ONE YEAR AND TWO YEARS AFTER HIGH SCHOOL TERMINATION

CAS Chapter*	One Year (June 1969)	Two Years (June 1970)
Work Community	4.00	4.00
Family Community	4.31	4.26
Social Community	4.50	4.32
Larger Community	3.64	3.54
Commercial Community	3.78	4.00
Professional Community	3.48	3.55

* Moen and Burnes, Community Adaptation Schedule. New York, Behavioral Publications, Inc., 1968

The ranges of individual changes in answers to the chapters of the CAS are shown in Table 39. These indicate that, even though average change in the panel is small, there are individuals whose attitudes and behaviors were considerably modified in the one year interval between interviews.

TABLE 39

RANGE OF INDIVIDUAL CHANGES IN CAS CHAPTER SCORES BY PANEL MEMBERS

CAS Chapter	Individual Changes
Work Community	+1.98 to -0.75
Family Community	+0.82 to -1.48
Social Community	+0.74 to -0.85
Commercial Community	+1.15 to -0.48
Professional Community	+1.12 to -1.30

Data reflecting change in panel members' answers to 21 selected items[6] of the CAS are in Table 40. One method of interpreting these is to consider, first, the magnitude of average change in the panel and, second, the distribution of changes to more- and less-favorable responses (from the first interview to the second). If the average change is relatively great, the direction of change is then examined.

This procedure identifies four CAS items in Table 40 to which the panel responds differently at the second interview. (An average change of .34 or more was used as guideline, based upon inspection of the data.) Parents, education, and independence are the topics. The general reason for the changes appears to be maturation. Item 82, about agreement with parents, could be interpreted as maturation due to a simple passage of time. Two items about education (154 and 156) are probably more a result of experience and observation (on the part of panel members) during the one year lapse: the changes reflect increased awareness of the importance of education and discomfort with their own educational achievements. Item 158, moving

6 The items were chosen because they correlated strongly with the total CAS scores in Survey I data (the first nine items in the table) or they relate to some of the general goals of the special EMR program (last twelve in the table).

from home shows a positive change which probably is associated with confidence gained through experience. (Item 120 defies interpretation because of so few answers to it.)

Three other items show high average change but a nearly equal number of changes in each direction. They are probably explained by unknown situational factors. Item 143 (involvement in groups) shows a positive average change but the individual panel members involved or not involved exchange places in the relatively short span of one year. (This is sometimes called "crossover.") A similar exchange takes place with regard to transportation problems (item 184) and since these are practical problems the exchange is probably due to practical reasons such as changes in the place of employment; however, the net effect (average change) is negative and indicates that transportation is an increasing problem in the second post school year. Personal budgetary problems (item 170) have also been impressed upon panel members during the one-year lapse although the changes are nearly equal in each direction, the average change is negative.

In total, the panel members' level of community adaptation seems to have increased in some instances while decreasing in others, with few clear trends emerging: the group responses to most items show relatively small change. This may mean the CAS is an insensitive instrument for use with EMR young adults. It may also reflect an underlying reality that adaptation to one's community is a relatively slow process. On the other hand, the range of individual changes in Table 39, above, could indicate considerable sensitivity of the CAS and a wide range of time involved in the adaptation process when <u>individual</u> responses are considered.

TABLE 40

CHANGE IN PANEL RESPONSES TO SELECTED CAS ITEMS OVER ONE YEAR INTERVAL

Item Number	Item	Number	Average Change	No Change	Favorable More	Less
82	In general, how much do you agree with your parents?	29	+.34	11	12	6
81	How much interest do your parents have in your daily experiences?	29	+.14	13	10	6
131	Do you think you would do these things (movies, theater, sporting events) more often if you had the opportunity?	29	-.10	16	7	6
46	In general, would you do volunteer work if it were asked of you?	29	-.10	10	9	10
79	Do you think your parents are satisfied with you?	29	+.10	13	7	9
120	Do you think you will get to know some of them (people at work) better?	9	+.55	2	5	2
5	Do you think you could find a job as good as or better than your present one within four to six weeks?	10	+.10	1	5	4
127	How many neighbors do you consider as personal friends?	28	-.21	16	7	5
145	In general, what do you think about people belonging to organizations?	29	+.21	14		7
49	With regard to work, are you where you thought you would be at your age?	26	-.15	11	7	8
154	Do you think you will ever further your formal education?	29	+.34	9	13	7
156	In general, how does your education compare with that of your social acquaintances?	28	-.36	7	7	14
124	Could you count on a neighbor for help if you needed it?	28	+.14	13	10	5
143	How often do you attend group functions	28	+.39	10	8	10
146	How often do you read a newspaper or news magazine?	28	-.28	14	6	8
158	How would you feel about moving from your present home?	27	+.48	8	7	12
161	In general, how interested are you in politics?	29	-.10	9	9	11
170	Do you think you show good money habits or good money sense?	28	-.43	11	7	10
184	Do you feel that transportation is a problem for you?	29	-.41	10	7	12
210	Would you support...more taxes for improvement of schools?	29	+.20	12	10	7
213	Would you be in favor of raising salaries of teachers	27	-.18	7	8	12

Summary

Some attributes of panel members may be related to low transiency and availability for interview. The loss of jobs by panel members was not as severe as the problems of more recent pupils (1969) in obtaining or retaining employment. A related finding is the constant proportion of high Employment Index scores among panel members; however, 26 per cent of the panel had lower Index scores and 21 per cent had higher Index scores in the second year and, of those whose score did not change, some had low scores in both years. There was a decrease in proportion of panel members who were self-sufficient in the second year and a related decrease in full-time employment. Comparison of CAS data shows a maturational change in four of 21 items and situational changes in three items. Of the latter, two indicate increasing problems after high school in transportation and budgeting. These, plus persistently low Employment Index scores, are a small indication of a larger need to provide more post-school services to the EMR young adult.

CHAPTER VII

SUMMARY AND IMPLICATIONS

This research was undertaken because of the continued interests of the Oregon Board of Education, the Oregon Vocational Rehabilitation Division, and the Oregon Rehabilitation Research and Training Center in Mental Retardation in evaluating the results of special school programs. The present report includes the second annual interviews with ex-pupils of EMR high school programs in Oregon, and thus is referred to as Survey II.

Both surveys have had three purposes. The first is to systematically describe the socio-economic and family backgrounds of EMR public school pupils. While "everyone knows" that the average EMR pupil is from a low income, low education, and dropout-prone family, the first of these surveys methodically demonstrated this. Survey II provides corroboration plus new evidence that the EMR pupil is seldom the first-born, is often born to parents who are well into their adult years, and may have been identified by school personnel at any time during the twelve years of public school.

The second purpose is to learn what effect, if any, differing economic environments have on the special programs and their ex-pupils. To adequately investigate this would require a span of years and repeated information about the same ex-pupils. In the shorter run, the surveys indicate the possibility of a fluctuating relationship between the economic vagaries of different regions in Oregon and the post-school fortunes of EMR young adults.

The third purpose is to learn the degree of success attained by these young adults. Because remunerative work is a top priority goal in America and is emphasized in the Oregon programs for the EMR

secondary school pupils, work success was investigated. Data of the first survey were interpreted as an indication that the positive effects of the special programs erode in the relatively short span of one year. Survey II data show the intensified effect of a slow economy on work opportunities for the EMR. These are not contradictory interpretations; rather, both surveys illustrate a need for post-high school services to this population.

Survey II concentrates on the 1969 graduates and dropouts from the same 14 school districts reported in the first survey. They are compared with the 1963 ex-pupils of these districts. A research panel consisting of three-fourths of the 1968 population (those available for re-interview) is also presented.

The total of ex-pupils in each year of school termination (identified in school district claims for reimbursement) are called the potential populations; those who could be located and interviewed are called the actual populations. Comparison of the 1968 and 1969 potential populations reveals slight differences in intelligence level and VRD referrals. These are between-years differences but they are not thought to be relevant. Within-year comparisons also reveal the potential and actual populations of each year to be very comparable. The comparisons presented in Chapter III are a test for possible selection bias due to year of termination or availability for interview. There is no evidence of population bias which discredits the data.

Chapter IV makes further comparisons of the 1968 and the 1969 actual populations. This is because other data are available about

the actual populations-- they were contacted and interviewed. More 1969 ex-pupils had been actual recipients of VRD services, they tended to come from slightly larger families, and proportionately more of their mothers are school dropouts. The 1968 actual population had considerably more working mothers and more fathers missing from the home. These factors may indicate a true difference in life styles; larger families and dropout mothers may signify a "traditional" life style while working mothers and missing fathers may signify an "industrial society" way of life. If such a difference exists, the effects of these life styles on work success of ex-pupils cannot be elucidated by this survey's data. For instance, the combination of missing father and breadwinning mother could be either positive or negative motivation for EMR young adults (or pupils). A survey, unfortunately, cannot answer such questions unless it is designed for such specific purposes.

Two criteria of work success are presented in Chapter V. The 1968 and 1969 actual populations are compared on these measures for their first year in the labor market (which is a different calendar year for each). Employment Index scores (described on page 7) of the 1969 ex-pupils for their first year in the labor market are definitely lower than 1968 scores of males of both years are higher; higher level intelligence is positively related with higher Index scores for the 1968 population but not for 1969; and there is a shift of most favorable geo-economic area. Three intervening variables which could have an effect are investigated (pp. 44-48): there are proportionately fewer high Index scores for ex-pupils of longest time in special class

and for school dropouts, but little difference in proportion of high scores between VRD clients and non-clients. The Contribution to Expenses measure (p.8) also is lower for 1969 ex-pupils and somewhat higher for males, but is not related to intelligence level or geo-economic area. Of the intervening variables, Contribution scores are again higher for ex-pupils of less time in special class but there is no demonstrated relationship to graduate-dropout status and the effect of VRD intervention is difficult to interpret.

The 38 members of the research panel are described and changes in work success measures over a one year period are presented in Chapter VI. The panel as a group has a constant proportion of high Employment Index scores for first and second post-school years but some individuals were lower on the Index and some higher in the second year (about one-fourth in each direction) while some others had low Index scores in both years. Full-time employment and Contribution to Expenses decreased in the second post-school year. The Community Adaptation Schedule identifies two practical problems which appear to become more serious for panel members in the second year: transportation and budgeting.

In total, there appears to be an interaction of personal maturational and general economic factors in most of the data. The relative effects of each have not been methodically established, but it is thought that the most permeating effect has been that of the now-historic economic slowdown in Oregon. Evidence of this is the increase in general rates of unemployment during the span of time investigated here; Appendix C presents the data. Because most of the data of this report are for different calendar years but for the first post-school year, personal maturational factors are overshadowed by general societal factors.

APPENDIX A

TWO CLASSIFICATIONS OF SCHOOL DISTRICTS

GEOGRAPHIC REGIONS:

NORTH VALLEY

Salem (Marion-Polk Counties)
McMinnville (Yamhill County)
Albany (Linn County)

CENTRAL VALLEY

Central Linn (Linn County)
Corvallis (Benton County)
Lebanon (Linn County)
Sweet Home (Linn County)

SOUTHWEST & EAST

Coquille (Coos County)
Gold Beach (Curry County)
Klamath Falls (Klamath County)
Hermiston (Umatilla County)
Pendleton (Umatilla County)
Ontario (Malheur County)

(Junction City, Unclassifiable) (Lane County)

DISTRICTS BY URBAN-RURAL LOCATION:

URBAN School Districts

Salem
Albany
Corvallis
Klamath
Pendleton

RURAL School Districts

Yamhill County (McMinnville)
Central Linn
Lebanon
Sweet Home
Junction City
Coquille
Gold Beach
Hermiston
Ontario

APPENDIX B

EMPLOYMENT INDEX COMPONENTS:
PART-TIME AND FULL-TIME WORK COMPARISONS
BETWEEN 1968 AND 1969 TERMINATION YOUTH, FOR FIRST POST-SCHOOL WORK YEAR

	1968 Termination (N=49)	1969 Termination (N=59)
Individuals Working Full-Time[1]	65%	54%
Average Number of Months Worked Full-Time	7.7 (246 mos. total, N=32	5.6 (181 mos. total, N=32
Individuals Working Part-Time[1]	35%	42%
Average Number of Months Worked Part-Time	7.0 (118 mos. total, N=17)	5.4 (135 mos. total, N=25
Individuals Active in Labor Market[2]	96%	38%
Average Number of Months in Labor Market One Year After High School Termination	10.6 (497 mos. total, N=47)	11.7 (608 mos. total, N=52)

1. The slight discrepancy in number of respondents reported is due to, (a) some persons not being in the labor market, and (b) to others holding both a full-and part-time job during the year.

2. Labor market includes those actively seeking a job.

APPENDIX C

OREGON EMPLOYMENT STATISTICS

Several issues raised in this report are the recent national decline in employment, the effect of that decline upon Oregon's employment level, and the susceptibility of EMR young adults to these economic fluctuations. The information presented in this Appendix is intended to substantiate the decline and its effects. Available information is sketchy and general, but substantiates, at least implicitly, several of the interpretations offered in Survey II.

Table C-1 compares unemployment rates in four sectors of the labor market plus the rate for the total national labor force in the months of June, 1969 and June, 1970, the same months reported for the EMR populations in Survey II. An increase in unemployment is apparent and general, while the Oregon rate is substantially higher than the national rate in both years. Also, the increase in Oregon's unemployment rate in the one year span of time is relatively greater than the one year increase in the national rate.

TABLE C-1

SELECTED RATES OF UNEMPLOYMENT*

Category of Workers	June, 1969	June, 1970
State of Oregon, both sexes, all ages	4.6	6.6
United States, both sexes, all ages	3.4	4.8
United States, both sexes 16 to 19 years	11.6	14.9
Service industries, national	4.5	5.1
Clerical workers, national	3.0	4.0

* These data were furnished by Oregon State Employment Service from reference materials available to that agency.

Employment data for specific age cohorts by state and county are not available according to one labor analyst, such data can be generated only by especially requested and funded surveys. Only the national figure for the 16 to 19 year cohort could be obtained (Table C-1) but it illustrates a generality which most labor analysts accept and use: that unemployment in that age cohort is three times the rate in the general population. The data for service industries are included in Table C-1 because it is a frequent category of employment for EMR persons and jobs in it are "entry level, high turnover" jobs. The clerical worker category is, on the other hand, "one of the most stable according to labor analysts.

The data of Table C-2 indicate a higher rate of unemployment in those regions of Oregon in which the EMR populations of Survey II reside. The absolute numbers in that Table, which were estimated by ten local offices of the Oregon State Employment Service, were used to derive the unemployment rate for the ten combined regions at two points in time.

TABLE C-2

UNEMPLOYMENT IN JUNE, 1969 AND JUNE, 1970
ALL AGES AND BOTH SEXES, AS ESTIMATED BY TEN OSES* REPORTING UNITS
WHICH ENCOMPASS THE FOURTEEN SCHOOL DISTRICTS OF THIS REPORT

	June, 1969			June, 1970		
County(ies)	Labor force	Un-employed	Rate	Labor force	Un-employed	Rate
Marion-Polk	82,200	4,000	4.9	81,200	6,200	7.6
Yamhill	16,430	940	5.7	19,710	2,010	10.2
Linn	32,500	1,570	4.8	34,270	2,840	8.3
Benton	24,800	1,480	6.0	25,300	1,530	6.0
Lane	94,400	5,900	6.2	96,550	7,950	8.2
Coos	23,340	1,570	5.6	24,140	2,330	9.7
Curry	5,120	250	4.9	5,140	370	7.2
Klamath	20,630	1,110	5.4	21,030	1,420	6.8
Umatilla	22,260	1,240	5.6	21,000	1,370	6.5
Malheur (plus two in Idaho)	20,060	2,550	12.7	19,720	1,630	8.3
Totals	341,740	20,610	6.0	348,060	27,650	7.9

* Oregon State Employment Service estimates the numbers and rates in the general labor force, such as shown in the Table, from numbers and rates among insured workers. The methods employed are generally accepted as reliable.

Applying the "three times" rule results in an estimate of 13.8 per cent unemployment in the state of Oregon among the 16 to 19 age cohort in June, 1969 and of 19.8 per cent in June, 1970 (Table C-1, rates of 4.6 and 6.6). For the ten regions of Oregon, this method of estimating for the 16 to 19 cohort results in estimates of 18.0 per cent in June, 1969 and 23.7 per cent in June, 1970 (Table C-2, rates of 6.0 and 7.9).

If the ER young adult is especially susceptible to economic fluctuations, as the Survey II report alleges, there may be an acceptable analogy to the non-white members of the labor force. A second rule of thumb used by labor analysts is that the unemployment rate among non-whites is about double that among whites. If both

generalities are to be applied to the unemployment rates in the general population, the multiplier is six. This results in an estimate of 27.6 per cent unemployment in the state of Oregon among the 16 to 19 age cohort in June, 1969 and 39.6 per cent in June, 1970. For the ten regions of Oregon, this method of estimating for the 16 to 19 age cohort results in estimates of 36.0 per cent in June, 1969 and 47.4 per cent in June, 1970.

These estimates are not unlike the findings reported in Survey II; in some instances the EOP populations were better employed than estimates described in this appendix would predict.

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