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José Pereda

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CHAPTER I

EDUCATION IN VENEZUELA

Introduction: The School in Latin America

Diversity is the term most applicable to the nations within the Latin American region. Shaped by socio-economical and political constraints both internal and external to the region, most of the countries which constitute this part of the New World have built upon their local natural resources and cultural characteristics. This has produced in the region a variable life style recognized as distinct, not only across national boundaries but within them as well. In spite of this diversity, Latin America is confronting a set of common and interrelated social problems to which solutions are being sought (La Belle, 1976). The school has been considered as one of the most important social institutions in working toward the solution of these problems. This principle is stated by Macdonald and Clark (1973) in these terms: "What appears to be missing in the contemporary scene is an overacting social commitment concerning the role of the schools in society. Historically, the Americans schools were said to be oriented towards developing character, citizens for democracy, and vocational adequacy" (p. 408). A similar idea is expressed by Perkins (1974): "As technology and rising standards of living induce more women to work outside the home, the school has been called upon to assume increased responsibilities for the socialization of children and youth" (p. 160).

Pearl (1973) criticizes the Illich point of view about "deschooling" when he says that Illich never tells us how his improved society will

function without institutions and that "Illich's call for deinstitutionalized schools in a deinstitutionalized society is nonsense, and dangerous to the extent that its simplicity is attractive" (p. 113). He is even more explicit when he affirms: "Try to deinstitutionalized education as a symbol and the beginning of the deinstitutionalization of everything and you reinstitute the law of the jungle - which quickly breaks down into a new set of oppressive institutions" (p. 116). Certainly, alternatives to the school are being looked for and some of them are in an experimental stage; however, the school, as institution, is still very much in force in Latin America and has a vitally important role to play.

Context of the Problem

Latin America has one of the highest population growth rates in the world. The population of the continent has been increasing at the rate of three percent annually. The population, which has already reached about 380 million, is expected to be around 685 million in the year 2000. For Venezuela alone, the respective numbers are 16 million and 28 million. The result is a higher proportion of children in the population than would be usual; and economic development of the country has been unable to keep pace with the high population increase.

From the perspective of social planning, there is little doubt that this kind of population growth negatively affects the capacity of all social service delivery systems. In the words of Burns (1964), "Latin America faces a paradox: to improve its education it must change its social order; to change its social order it must develop and distribute its economic resources; but it does not have the educational system to provide sufficient

personnel who can do the job..." (p. 200). This is perhaps because the educational systems are not adapted to the social reality of Latin America. Latin American countries are very much concerned with the formation of a professional elite to the detriment of a basic technology required for their development.

Secondary Education in Venezuela

Venezuela is a privileged country from many different points of view:

-human values: love of freedom, patriotism, moral principles and traditional concept of the family.

-natural resources: oil, iron, gold, diamonds, silver, cattle raising and agriculture constitute the main wealth of the country.

-geographical location: situated beside the Caribbean Sea which is a strategic point for air and maritime communications.

-political reputation: with a stable democratic system of government it is playing a crucial role in defending human beings in the world.

In spite of these, the high population growth is affecting the society, the family and the school.

All Venezuelan governments have been concerned about the necessity of improving schools and many efforts have been made in this direction.

However,

-the student population explosion

-a lack of good teachers

-a new family structure

-political and social changes

-inversion of human values, and

-changes in the concept of authority

are, among others, important factors which have prevented schools from maintaining instructional quality.

In Venezuela, as in most countries, the secondary school constitutes the necessary background for all professional or technical careers. It is organized as follows:

-a Basic Cycle which includes the 1st, 2nd and 3rd grades.

-a Diversified Cycle which includes the 4th, 5th and 6th grades.

It is to be noted that the third year of the Diversified Cycle must be considered as extra curriculum; the normal system consists of five years of secondary school (3 basic plus 2 diversified).

Table 1 provides information about the total amount of students in Venezuelan secondary schools and the increasing rate of this population for the 1969-79 period. The table shows further the constant increase of the annual registration in the secondary school for the ten year period. The increase between the first and the last year has been:

-Basic Cycle : First 188%; Second 203%; Third 232%

-Diversified Cycle: First 251%; Second 284%; Third 1,474%

Table 1. Chronological Series of Students in Day Secondary Schools classified according to Years of Study. (Adapted from Ministry of Education 1979, p. 417)

SCHOOL YEARS	GENERAL TOTAL	BASIC CYCLE			DIVERSIFIED CYCLE		
		FIRST	SECOND	THIRD	FIRST	SECOND	THIRD
1969-70	360,435	135,343	86,948	64,519	44,577	28,084	964
%	100.0	37.5	24.1	17.9	12.4	7.8	0.3
1970-71	417,367	147,835	103,035	78,189	51,650	35,192	1,466
%	100.0	35.4	24.7	18.7	12.4	8.4	0.4
1971-72	476,024	164,760	114,963	91,444	57,477	45,297	2,083
%	100.0	34.6	24.2	19.2	12.1	9.5	0.4
1972-73	533,653	182,365	125,726	99,823	72,379	49,950	3,410
%	100.0	34.2	23.5	18.7	13.6	9.4	0.6
1973-74	584,211	199,653	137,591	109,589	77,548	56,242	3,588
%	100.0	34.2	23.5	18.8	13.3	9.6	0.6
1974-75	631,210	210,124	145,734	119,792	86,172	59,892	9,496
%	100.0	33.3	23.1	19.0	13.6	9.5	1.5
1975-76	669,138	224,048	155,391	126,611	91,120	62,933	9,035
%	100.0	33.5	23.2	18.9	13.6	9.4	1.4
1976-77	719,680	231,480	167,867	136,472	103,049	70,631	10,181
%	100.0	32.2	23.3	19.0	14.3	9.8	1.4
1977-78	751,430	243,305	172,325	145,378	105,094	74,514	10,814
%	100.0	32.4	22.9	19.3	14.0	10.0	1.4
1978-79	787,032	254,910	176,453	149,957	111,829	79,671	14,212
%	100.0	32.4	22.4	19.1	14.2	10.1	1.8

During the ten year period, the percentage of students in the Diversified Cycle (first two years) in relation with the general total passed from 20% to 24%. Otherwise, the increasing rate of students, for the same period, was 188% for the first year of the Basic Cycle and 284% for the second year of the Diversified Cycle.

As noted in Table 1, the total student population in the Venezuelan secondary schools, for the school year 1978-79, was 787,032 students: 581,320 in the basic cycle and 205,712 in the diversified cycle. These students were cared for by a total of 47,496 teachers (an average of 16.65 students per teacher) in 1,447 schools (an average of 544 students per school). This represents a great national effort; however, the high percentage of dropouts, that will be studied later, graphically demonstrate the problematic situation through which the school system is now passing.

It is interesting to bring to the mind what Schreiber (1967) said: "Certainly the reasonable social policy would be not to have these youth in school, but to educate them otherwise and provide opportunity for a decent future in some other way. At present, our society does not know how to cope with these youth, and really isn't interested " (p. 31). Goodman (1961) was more specific when he affirmed: "Our society and its school trap first deprive the young of objective human opportunities, including virtues that belonged to the middle class" (p. 12).

The progressive increase in the student population cannot be considered only as a problem for the country but as human wealth. Hence, to find more adequate educational systems to cope with the situation should be a challenge for the Venezuelan society.

Comparison between Public and Private Schools

Student enrollment and growth of secondary schools. Figure 1 is not only an illustration of Table 1, but also shows the difference in student numbers between public and private schools. As it is clearly shown, the number of students attending private schools is very small compared with that in public schools. The reasons for this will be dealt with in detail later in this section.

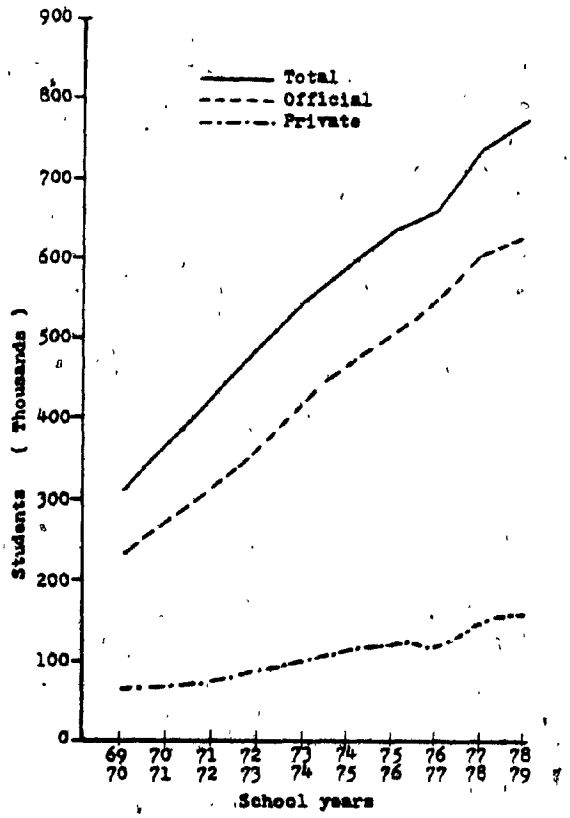

Figure 1. Comparison of Student Enrollment in Private and Public Day Secondary Schools. (Adapted from Ministry of Education 1979, p.417)

It should be noted that the official public schools still remain formally diversified as follows:

-National: those supported by the central government.

-State : those supported by the state government.

-Municipal: those supported by the municipal administration.

Table 2 shows that before 1972-73 there were more private secondary schools than public secondary schools, though the latter were in general larger.

Table 2. Chronological Series of Day Secondary Schools, classified as to Dependence.
(Adapted from Ministry of Education 1979, p.440)

SCHOOL YEARS	GENERAL TOTAL	OFFICIAL SCHOOLS					TOTAL PRIVATE SCHOOLS
		NATIONAL	AUTONOMOUS	STATE	MUNICIPAL	TOTAL OFFICIAL	
1969-70	858	272	19	26	22	339	519
70-71	892	310	14	30	26	380	512
71-72	974	431	17	14	9	471	503
72-73	1,027	545	14	10	6	575	452
73-74	1,103	628	14	10	5	657	446
74-75	1,173	716	15	1	3	735	438
75-76	1,204	792	14	1	2	809	395
76-77	1,317	868	15	1	2	886	431
77-78	1,429	926	11	.	1	938	491
78-79	1,447	927	6	.	.	933	514

While the public national schools were increasing considerably, the number of private schools decreased progressively until 1975-76; however, the latter have increased more rapidly than public schools during the last two years. Overall, for the decade 1969-79, the public schools have increased 175% while the private schools have decreased 1%.

Figure 2 shows that the number of public schools is growing very fast while the number of the private schools still remain essentially static. This is due to two fundamental reasons:

1. The shortage of teachers available for private schools, who do not enjoy the economical advantages that the official teachers have.

2. The lack of economical resources necessary not only to increase the number of schools but to maintain the administration of existing schools.

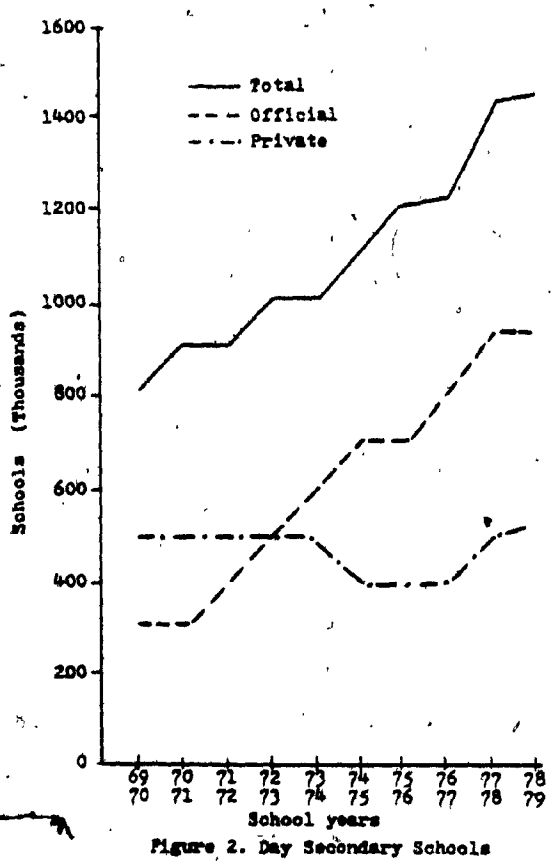

Figure 2. Day Secondary Schools
(Adapted from Ministry of Education 1979,p.441)

The Venezuelan government intends to stimulate private education because it recognizes the valuable social contribution of the private school for the development of the country. "Education... is a public service given by the state or by private persons following the principles and norms established by the law" (Ley Orgànica de Educaciòn, 1980, Art. 4., p. 4). This will not be realized unless the state assumes a greater economical responsibility to uphold the private schools.

Traditionally, Venezuelan governments have been concerned about the contribution of the private schools. However, given the present socio-economical conditions through which the country is passing, it is increasingly difficult for the private education facilities to continue functioning. On the other hand, many of the Venezuelan private schools are under the care of religious institutions which, according to recent changes in their educational philosophy, will no longer maintain those schools that involve a progressive

increase in school fees to the detriment of the poor.

Teacher supply. In general, the average number of teachers in a public school is 39, while in a private school it is 22. Ten years ago those numbers were 37 and 15 respectively.

For the same decade the number of teachers in the public schools increased 183% as opposed to 53% in the private schools. To further amplify the comparison, the number of teachers in the private schools in 1978-79 was the same as those in national schools during the school year 1969-70, that is 11,526 (Table 3).

Table 3. Chronological Series of Teachers in Day Secondary Schools classified as to Dependence.
(Adapted from Ministry of Education 1979,p.437)

SCHOOL YEARS	GENERAL TOTAL	OFFICIAL SCHOOLS					TOTAL PRIVATE SCHOOLS
		NATIONAL	AUTONOMOUS	STATE	MUNICIPAL	TOTAL OFFICIAL	
1969-70	20,244	11,526	503	344	338	12,711	7,533
70-71	22,367	13,601	352	329	341	14,623	7,740
71-72	25,883	17,271	445	231	96	18,043	7,840
72-73	28,363	19,524	390	106	121	20,141	8,222
73-74	31,087	22,036	424	117	105	22,682	8,405
74-75	35,796	26,170	458	4	51	26,683	9,113
75-76	39,876	30,041	483	14	40	30,578	9,298
76-77	43,637	32,995	451	15	41	33,502	10,135
77-78	45,823	34,505	330	.	19	34,854	10,969
78-79	47,496	35,782	188	.	.	35,970	11,526

Note: In this table, teachers are considered as one person even when they work in different schools of the same dependence; however they are considered as a different person when they work in schools of different dependence.

Figure 3 shows the clear disparity between the growth of teacher supply in public (official) and private schools. Salient reasons for this condition are:

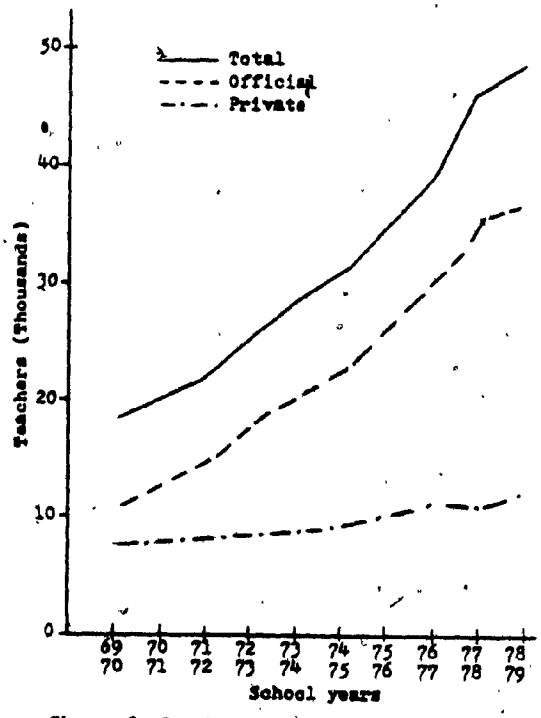

Figure 3. Teachers of Day Secondary Schools
(Adapted from Ministry of Education 1979,p.438)

(a) Teachers who work in the private sector do not have the same economical advantages as those who work in the public sector. Some disadvantages, in general, are:

- the wages are lower.
- there is no defined plan for retirement.
- they do not have the facilities for government scholarship or participation in courses for improvement that official teachers have.

(b) The lack of economical resources compels private institutions to reduce the number of teachers in their schools.

Looking back to the previous figures and tables concerning the number of students, teachers and schools involved in Venezuelan education,

it is possible to appreciate the tremendous human and economic effort that the country is doing in this area. In spite of this, the results are not as satisfactory as they should be.

Dropouts from Venezuelan Secondary Schools

Dropouts constitute the major set-back for the country.

Table 4. Chronological Series of Dropouts in Secondary Schools from Grade One to Grade Four and Graduating Students (Absolute and relative numbers).

(Adapted from Ministry of Education 1979.p.430)

SCHOOL YEARS	GENERAL TOTAL		YEARS OF STUDY								GRADUATING STUDENTS AFTER GRADE 5	
			FIRST		SECOND		THIRD		FOURTH			
	Absol.	%	Absol.	%	Absol.	%	Absol.	%	Absol.	%	Absol.	%
1968-69	60,548	20.8	33,116	27.9	11,230	14.5	8,828	15.3	7,374	19.8	22,819	95.5
69-70	57,096	17.4	32,340	23.9	8,475	9.8	8,612	13.4	7,669	17.2	27,181	96.8
70-71	62,286	16.4	32,819	22.2	10,944	10.6	13,672	17.5	4,851	9.4	33,960	95.5
71-72	65,358	15.3	36,116	21.9	14,294	12.4	9,831	10.8	5,117	8.9	44,180	97.5
72-73	80,579	16.8	40,414	22.2	15,590	12.4	13,755	13.8	10,820	14.9	48,688	97.5
73-74	90,837	17.3	44,707	22.4	18,862	13.5	14,598	13.3	12,670	16.3	53,436	95.0
74-75	100,745	17.9	43,965	20.9	19,301	13.2	19,473	16.3	18,006	18.0	57,310	95.7
75-76	91,323	15.3	44,447	19.8	18,809	12.1	14,393	11.4	13,674	15.0	60,541	96.2
76-77	115,990	16.3	48,646	21.0	22,944	13.7	21,818	16.0	22,582	22.0	67,888	96.1
77-78	119,501	15.9	54,496	22.3	24,028	13.9	21,477	14.8	19,500	18.6	71,251	95.6

Table 4 shows the number of dropouts from 1968-69 to 1977-78 and a 97% increase during the period. The increasing number of students for the same period was 118%. Over a shorter period, however, the same improvement is not revealed. During the last five years the increase in the number of students has been 34% with that of dropouts being 48%.

Table 5 analyzes only what has happened during the last seven school years.

Table 5. Chronological Series Comparing Students that Started the School Year with those that Finished it. (Adapted from Ministry of Education 1979, p.433)

SCHOOL YEARS	GENERAL TOTAL			OFFICIAL			PRIVATE		
	October	June	Difference	October	June	Difference	October	June	Difference
72-73	533,653	508,323	25,330	431,318	409,959	21,359	102,335	98,364	3,971
73-74	584,211	558,219	25,992	477,158	453,890	23,260	107,053	104,329	2,724
74-75	631,210	598,963	32,247	513,107	481,177	31,930	118,103	117,786	317
75-76	669,138	652,248	16,890	554,359	531,919	22,440	114,779	120,329	+ 5,550
76-77	719,680	683,268	36,412	589,209	555,587	33,622	130,471	127,681	2,790
77-78	751,430	709,850	41,580	606,774	567,964	38,810	144,656	141,886	2,770
78-79	787,032	754,229	32,803	628,460	601,765	26,695	158,572	152,464	6,108

The percentage of dropouts varies from one year to another, at about 4 or 5%. However, it does reveal a fairly consistent tendency. The school year 1975-76 is surprising for its relatively low number of dropouts (16,890 = 2.5%). It is commonly supposed that a great number of students are moving continuously from the public schools to the private schools because private schools guarantee a better education due to better management. However, the affluence of students in the private schools for the year 1975-76 (more students at the end of the year than at the beginning) does not seem to be caused by a great displacement of students from public schools to private schools, because public schools had the lowest percentage of dropouts that year.

A general opinion in the country is that the number of dropouts in the public schools is overwhelmingly above those of the private schools. This is not exactly true. The small difference existing is due to the private schools being very selective from both economic and intellectual points of view. Generally speaking, the characteristics of dropouts in public and private schools are very similar (see Table 6).

Table 6. Comparison between the Students of Day Secondary Schools that Started the Year and those that Finished it, classified as to school Dependence. School Year 1978-79.
(Adapted from Ministry of Education 1979, p.432)

GRADE OF STUDIES	TOTAL			OFFICIAL			PRIVATE		
	October	June	Difference	October	June	Difference	October	June	Difference
TOTAL	787,032	754,229	32,803	628,460	601,765	26,695	158,572	152,464	6,108
BASIC CYCLE	581,320	552,717	28,603	479,283	454,818	24,465	102,037	97,899	4,138
FIRST	254,910	238,373	16,537	215,973	201,197	14,776	38,937	37,176	1,761
SECOND	176,453	169,734	6,719	143,196	137,528	5,668	33,257	32,206	1,051
THIRD	149,957	144,610	5,347	120,114	116,093	4,021	29,843	28,517	1,326
DIV. CYCLE	205,712	201,512	4,200	149,177	146,947	2,230	56,535	54,565	1,970
FIRST	111,829	108,032	3,797	83,935	81,528	2,407	27,894	26,504	1,390
SECOND	79,671	78,946	725	56,744	56,615	129	22,927	22,331	596
THIRD	14,212	14,534	- 322	8,498	8,804	- 306	5,714	5,730	- 16

Note: Comparing the registration of October and June gives a difference of 32,803 students less at the end of the year (4,1 %).

The note under Table 6 can be interpreted in two ways:

-4.1% does not represent a marked improvement over the preceding years.

-the percentage of dropouts is a little higher in the public schools than in the private schools: 4.25% against 3.85%.

What is more serious is the percentage of dropouts for the first year: more than 7% for the public schools or about one student in 14. The fall in the number of students from one level to the other cannot be explained by a greater number of students moving to the secondary level. (The third grade of the diversified cycle remains marginal and cannot be compared to the others.)

Table 7 shows more clearly the real problem of dropouts. It contains the students registered for the first year of secondary school for 1974-75 and follows the registration of this original group for the following four years.

Table 7. Students' Perseverance

(Secondary School)

SCHOOL YEARS	YEARS OF STUDY	STUDENTS REGISTERED	PERCENTAGE
1974-75	First	210,124	100.0
1975-76	Second	155,391	74.0
1976-77	Third	136,472	64.9
1977-78	Fourth	105,094	50.0
1978-79	Fifth	79,671	38.0

As can be noted, of the original 210,124 students who registered for the first year of high school in 1974-75, only 79,671 or 38% registered for the fifth year in 1978-79.

Financial Resources

Another point to be considered which is directly related to the dropout problem is the amount of money spent by the Venezuelan government for education and how much of it is profitable.

The preceding tables have showed that during the period 1969-79 the increasing number of schools was 69% (see Table 2). During the same period the increasing number of students was 118% (Table 1) and teachers 134% (Table 3). However, the budget increase for public schools was 523% (Table 8).

Table 8. Budget for Education (Thousands of Bs.)
(Adapted from Ministry of Education 1979, p.338)

YEARS	1	2	3	4	VARIATION %			
	MINISTRY OF EDUCATION	STATE GOVERNMENTS AND MUNICIPALITIES	OTHER MINISTRIES	TOTAL	1	2	3	4
1969	1.397.798	327,656	228,684	1,954,138	100	100	100	100
70	1,668,626	355,131	315,482	2,339,239	119	108	138	120
71	1.888.194	417,822	258,910	2,564,926	135	127	113	131
72	2,236,967	532,011	348,480	3,117,458	160	162	152	160
73	2,837,718	622,034	259,412	3,719,164	203	190	113	190
74	3,656,310	566,683	258,634	4,481,627	262	173	113	229
75	4,817,041	745,698	660,096	6,222,835	345	228	289	318
76	5,676,930	691,472	761,364	7,129,766	406	211	333	365
77	6,907,090	722,378	934,827	8,564,295	494	220	409	438
78	7,432,540	446,653	906,566	8,785,759	532	136	396	450
79	8,702,355	872,670	730,098	10,305,123	623	266	319	527

The budget increase of the Ministry of Education is significant and constant while budget increases of the other official organisms in the field of education have not kept the same pace. State and local governments have been particularly erratic in the annual allotments. As a result, the present contribution of the Ministry of Education to public instruction is 84.5%

The complete budget for the country in 1970 was 10,286 million Bolivares (2,800 million Canadian dollars). Ten years later this was almost the amount invested for education. However, this tremendous effort does not correspond to the results obtained. In other words, a student who attends school only briefly has wasted the money used to support this period of studies, and a high dropout rate must inevitably have an effect upon the national economy. Dropouts not only failed themselves and their parents, but their country as well. The great amount of money wasted by the dropout could be used to improve the educational system. It is clear that student dropouts are interfering with the progress of the other students and hence with the progress of the country.

As Table 9 indicates, the country is losing about:

-38% of the money invested in the elementary school.
-61% of the money invested in the secondary school.
-92% of the money invested in the national universities.

Table 9. Summary of the Student's Perseverance in Elementary and Secondary Schools and National Universities (Percentage)

YEAR	ELEMENTARY SCHOOL		SECONDARY SCHOOL		NATIONAL UNIVERSITIES	
	Finished	Dropped	Finished	Dropped	Finished	Dropped
1975	61	39	40.51	59.49	9.34	90.66
1976	62	38	38.20	61.80	7.89	92.11
1977	63	37	38.73	61.27	7.84	92.16
1978	64	36	37.32	62.68	6.79	93.21
1979	61.8	38.2	36.00	64.00	6.28	93.72

This is the case of saying what Schreiber (1967) affirmed: "Failure to improve educational performance is thus not only poor social policy, it is poor economics" (p. 3).

It is true that the economical aspect is not the prior factor to have in mind when studying the case of dropouts. It stems rather from discouragement and disappointment that these students have not responded to the many attempts to help them with their problems.

CHAPTER II

PROBLEM STATEMENT

Who is Involved in the Problem

Education is one of the major vehicles for producing fundamental changes in society. The crisis through which the Venezuelan society is presently undergoing is directly related to the present situation of the education.

The Ministry of Education has decreed that the improvement of Venezuelan education is the responsibility of all the Venezuelan people.

-Responsibility of the student: He should be interested in applying a willingness to learn through constant discipline in preparation for the future.

-Responsibility of the teachers: They should not only give instruction but stimulate the student's interest and responsibility.

-Responsibility of the parents: They should promote and value the will of their children's improvement.

-Responsibility of the media: They should cooperate in the educational process by stimulating the potentiality and the positive tendencies of the people and produce programs toward this goal.

It is necessary that each teacher, student and parent be conscious of his responsibility. We have a challenge and we should work toward overcoming it everyday (Ministry of Education, 1980).

The Reason for the Study

Looking backward and forward on the real situation of the Venezuelan education and more specially on the problem of dropouts, one can objectively see what kind of factors can be analyzed in order to identify those characteristics which are more closely linked to the origin of the problem. A good educational technologist, as manager of a high school, should be able to obtain the best advantages of a favorable situation given by the specific conditions where the institution is operating and to reduce the impact of adverse situations (Mann and Brunstrom, 1969).

All that exists in Venezuela about dropouts in secondary school are statistical results. Nothing has been done to investigate the sources of the problem. There are, in my opinion, some important reasons for this:

1. The complexity of the dropout problem. As it was mentioned previously, factors related to parents, students and probably society itself are all involved in the problem.

2. The great number of students who attend schools is undermining the seriousness of the problem. School authorities and teachers primarily complain about the swelling enrollment of students and because of this "dropouts" are considered as a minor problem. Moreover it appears as one mechanism which is a solution to the situation.

3. The constant increase in the student population and the permanent worry of providing it with human and material resources has turned attention away from the dropout problem. This fact concerns both the government and family. It is the duty of the government to provide schools to new students because attendance is demanded by the law.

It seems that the dropouts constitute an apparent solution for the government. On the other hand, families are more concerned about the education of the new students than the dropouts.

4. The excessive importance that is given to student achievement to the detriment of a serious consideration of repetition and dropouts. In many cases, achievement scores are the only factors used to measure the sucessful functioning of a school. Achievement test scores are good indicators of the school reputation. Other aspects, including dropouts, are seen as less relevant.

5. The lack of an official or private initiative for a study of the dropout problem. Perhaps this is a consequence of lack of concern about its seriousness.

The Purpose

The purpose of this study will be to identify some important characteristics of student dropouts in a Venezuela secondary school. The specific objective will be to develop a profile of the potential high school dropout in order to:

-better appreciate the implications of the problem.

-provide suggestions for follow-up future investigation.

Following the development of a dropout profile, the final portion of the study will be directed to orienting the school authorities toward possible corrective solutions. The study will be carried out in a Venezuelan public day high school which will meet the characteristics described in the methodology chapter.

Objectives

This study has the following general objectives:

1. To sample dropout predictions of first year high school students concerning five years of high school studies.

2. To measure and to analyze key variables which may influence student dropouts.

3. To present to the school authorities the results of the study, so that they may see more clearly the dimensions of the problem.

4. To orient the school authorities to possible strategies to follow in the solution of the problem.

Contributions

It is hoped that this study will make the following contributions:

1. This study will provide a better knowledge of the real situation to the school authorities.

2. This study will identify some key causes of school dropouts in the Venezuelan secondary school system.

3. The recommendations from this study could improve the functioning of the school and contribute to decreasing the number of dropouts.

4. The analysis of the results of this study will give to the staff of the institution a better knowledge of their students' characteristics.

Limitations

The major limitations of this study can be summarized as:

1. To make a prediction is a difficult task for some students because of their possible unclear idea about their future; this inconvenience will possibly distort the predictive dropout results.

2. Because the study is to be carried out in a particular school may preclude the possibility of broad generalization of the results.

CHAPTER III

LITERATURE REVIEW

Salient Factors in School Dropouts

The term "dropout" will be used here to designate a secondary school student who has been in membership during the regular school term and who withdraws from membership before graduating from secondary school. For Cervantes (1966), a dropout is "a youth who from any reason, except death, has left school before graduating and without transferring to another school" (p. 196). Greene (1966) expresses the same idea when he says: "The dropout is defined as any student who leaves high school without graduating" (p. 3).

The dropout problem has been considered under a multiplicity of factors, largely related to school, family and society itself. The population explosion, socio-economical level, constitution of the family, school organization and teaching quality are among the most important causes.

According to Kline (1933), one of the first investigators on the problem of dropouts was Thorndike who found that during the years 1900-1904, 81.7% of students left school before or during the ninth grade. Kline repeated Thorndike's study in 1918 and found that the greatest number of school leavers left between the ninth and tenth grades; in the short period of eighteen years, leaving from school was postponed an average of two to three years. According to Kline, the significant shift in the dropout pattern from elementary to the junior and senior high schools forced the secondary school to recognize the problem.

Dear (1933) in a study carried out in Michigan schools arrived at the conclusion that children of the non-laboring class persisted longer in school than did the children of the laboring class. This was a remarkable study which demonstrated the relationship between social class and dropping out of school. A notable group of sociologists have made detailed studies in a variety of communities finding an interesting relationship between socio-economic class and persistence in school (Warner, Meeker and Eells, 1949). Davie (1966) noted that "the percentage of dropouts increases sharply with each downward step on the socio-economic ladder" (p. 97). For Allen (1956) this aspect does not represent a significant characteristic for dropouts. And, for Bowman and Matthews (1960) "dropping out of school is essentially a function of the lower class" (p. 23). In a study carried out by The Canadian Research Committee on Practical Education (1950), it was found that pupils from families below average in economic status are more likely to be dropouts, and most likely to be early dropouts. In the same way, occupation of the father is strongly associated with rates of dropping out. Other characteristics mentioned by this study are: lack of interest, need of help at home, attitude of parents, insufficient ability and inadequacy of family.

The matter of money for school has been a major concern of a substantial number of studies, mostly those looking at various indices of socio-economic status. These studies frequently report a negative correlation between variables such as parents' education, occupation, and income: The lower the level of family education, the lower the occupational position, and the lower the family income, the greater chance of being among the

dropouts. For many authors, family income, occupation, and education are unified around the concept of social class. As Cope (1975) affirmed: "We believe that the commitment to finish college resulting from the motivational climate of the family is far more important than having enough money in accounting for the student's own efforts to solve money problems" (p. 18).

From another point of view, school adjustment is an important characteristic to be considered in the problem of dropouts. For Lichter (1972): "The high school dropout is usually a child who has failed in his general school adjustment. This failure is not necessarily a matter of a specific learning disability but rather a broader 'educational' disability" (p. 2). The point is not made clear, however, because the same author further affirms that a group of students utilize school quite consciously in an effort to resolve a conflict existing in another area of their life or to effect some change in their relationship with their relatives. As Schreiber (1967) said: "The dropout is not always a lovable person, he may be aggressive or sullen and withdrawn" (p. 373). For some scientists, involving students in school activities seems to be a part of the solution of the problems concerning the dropouts. For Thomas (1954) one of the most relevant factors influencing dropouts was the level of participation in school activities. Johnson and Legg (1948) have arrived at a similar conclusion when they said that dissatisfaction with school was the major reason for leaving school prior to graduating. "The single most important factor given by dropouts for leaving school is their dissatisfaction with the school" (Greene, 1966, p. 40). From these points of view it is possible to

infer that whether or not a student becomes a dropout depends not only on the particular background and personal characteristics he brings with him to school, but also on the characteristics of the institution he meets when he arrives. Clear understanding requires not only that the personal characteristics of dropouts be understood, but also that the relationships between those characteristics and the forces generated by the school institution be clearly identified. According to Lichter (1962), dropouts left school because they were motivated to run away from a disagreeable situation; they did not feel impelled to run toward a definite and positive goal.

Another study made by many investigators and considered as a reason for dropout is "academic skills". Interesting findings from the Bowman and Matthew's study (1960) indicate that dropouts were poor readers and with an academic level below average. They also found that the parents of dropouts are indifferent to school persistence on the part of their children. In some cases "failure" in school for the middle-class child can be more personally disorganizing because the continuity of values from home to school insures that such a child will be considered a failure in both places" (Schreiber, 1967, p. 205). Relating dropouts to students achievement, Felton and Biggs (1977) have noted that: "School withdrawal is only the visible part of the underachievement iceberg" (p. 11). Among all the variables studied by a great number of authors, academic readiness is the most common variable considered; the average score on aptitude tests in most of the cases has been found to be lower for dropouts.

However, academic ability is not useful in any practical sense for predicting student's dropout because of the homogeneous student population (Bayer, 1968). However, Katz and Wright (1977) carried out an experiment to measure the effectiveness of study skills and reached the conclusion that a lower dropout rate was found among the students who received previous training in this area.

Certainly the adolescent period is a time of turbulence in most families, especially in those where serious problems as economics, divorce, infidelity, and lack of home facilities exist. A combination of irritation and lack of understanding lead to a general student's dissatisfaction. It is accepted by Cervantes (1966) that the dropout is reared in a family which has less solidarity, less primary relatedness, and less paternal influence than does the family in which the graduate is reared. Studies made by Greene (1966) revealed that a shift from an agrarian to an industrial society is responsible for the changing function of children in the family. The children who were once a necessity in the economic life of the family are now superfluous. Even in Venezuela where the family is still quite numerous, the education that the parents are giving to their children is very far from an adequate one. For Saenger-Ceha (1972) communication between parents and their children is essential; "An important element in the dynamics of a successful school student is that identification with the parent is genuine, and that there is a real internalization of parental values associated with school success" (p. 23). That is the reason why for some scientists a good constitution of the family is a guarantee of student's perseverance--a separated family can

enhance the dropout problem. In a study made by the Kettering Foundation and the National Association of Elementary School Principals (1979) with 8,556 students at 15 elementary and high schools in U.S. it was concluded that, "The one parent children showed substantially more absenteeism, truancy, discipline problems, suspensions and dropouts" (Time magazine, 1980). When Wrenn (1967) talked about the family as a potential cause of dropout he said: "It is well known to that the parents of many potential dropout students are not much interested in their children or in their children's progress in school" (p. 372). From a similar point of view, Cervantes (1966) noted that "The fact that the youth who continues in school has his origins in a family where personal acceptance, communication and pleasure are staples is particularly noteworthy. The nuclear family is of critical importance in the consideration of the dropout problem" (p. 37).

Several studies have been carried out using sex as an independent variable, however, several contradictions have emerged. To make dropout predictions based on sex differences becomes a difficult job for investigators. Two of the most important conclusions obtained by Dillon (1949) in an effort to identify characteristics of dropouts were: (a) More girls than boys dropped out of school; (b) There is no relationship between the size of the family and the probability of leaving school. Cope (1975) in a survey concerning sex and dropouts noted some interesting findings of several scientists:

-men have a higher attrition rate than women (Iffert, 1957)

-more men than women reentered after a forced withdrawal (Hill, 1966)

-fifty-four percent of dropouts were men and forty-six percent were women (Fenstemacher, 1973)

-little or no variation in the attrition rate for men and women is found by Cummings (1949), Halladay and Andrew (1958), and Panos and Astin (1967)

-women tend to graduate on schedule more often than men (Astin, 1973)

-men are more likely to eventually complete degree requirements (Tinto and Cullen, 1973).

Age has also not produced a clear pattern as a cause for dropping out. Indeed, most of the investigators do not mention the age factor in their studies. In a study by Cook (1956) for example, the findings suggested that younger children are less likely to withdraw then older children, but children who are between other siblings are more likely to drop out. At the end of the study, Cook concluded that dropping out of school results from a multiplicity of factors.

An interesting review by Summerskill (1962) found that the major factors associated with dropouts were biological and social, academic, motivational, adjustment, illness and injury, and finances. Academic factors, e.g., high school preparation and performance in college, motivation, including both lack of it and changes or conflict in it, and finances emerge most clearly from the literature as important determiners of school attrition. Evidence concerning the roles of social factors (such as socio-economic variables and home - town location and size) and personal social adjustment are still inconclusive. Iffert (1957), in a study about reasons given for dropping out (college level) found that a

lack of interest in studies was the first cause for male dropouts.

Cervantes (1966) summarized in a "Dropout Prediction Table" twenty characteristics of dropouts related to the school, family and peers. Among the most important are: poor background, irregular attendance, low performance, behavior problems, unhappy home life, education of parents, friends not approved by parents, friends not school oriented and weak self-image. For Greene (1966) factors such as reading skill, age, attendance, home background, financial need, participation in school activities and dissatisfaction with school have significant importance.

Zeller (1966) in his article about "Clearing up some misconceptions about dropouts", pointed out that the results of these studies are often summarized in a list of characteristics that "cause school dropouts" and that it does not tell why a characteristic tends to produce a dropout. Other authors, such as Elliot, Voss and Wendling (1966) distinguish between the involuntary dropout who may leave because of accidents, a second group not capable of doing the necessary work, and a third, the "capable" dropout who leaves for reasons such as behavioral problems, poor attendance or psychological reasons.

A noteworthy study by the United Community Services of Greater Vancouver Area (1970), "The school and the dropout", revealed that among the most significant characteristics of dropouts were: grade repetition, poor scholastic achievement, and non-participation in school activities. The same study in the "concluding remarks" affirmed: "It has been suggested in this report that early school leaving and student dissatisfaction with the school can be seen in terms of educational failure, perceived irrelevance

of school and noninvolvement in the process of education" (p. 69). The study shows that factors related to academic results, school involvement and school adjustment are very important causes of dropouts. Involvement and adjustment seem to be the most relevant factors, and intimately linked to academic activities. For Panos and Astin (1967) dissatisfaction with college environment was found as the first cause for male dropouts.

As the foregoing review demonstrates, several factors may be involved simultaneously in influencing withdrawal from school. Because of this, the problem becomes quite complex with no single or simple formula for measuring the potential dropout. As Pervin (1966) concluded from his study of dropouts: "One of the most obvious and striking conclusions to be drawn is that the phenomena are multifaced and therefore need to be studied broadly as well as in concentrated detail ordinarily reserved for specialists" (p. 237).

In spite of the difficulty in addressing the problem, identifying the potential dropout is probably one of the single most important factors in any program geared to prevent school dropouts.

In summary, the distillation of research literature has produced the following salient causes of dropouts:

-Sex: Dillon (1949); Cope (1975)

-Age: Cook (1956)

-Occupations of the parents: Dear (1933)

-Education of the parents: Cope (1975)

-Attitude of parents: The Canadian Research Committee on Practical Education (1950)

-Socio-economic class: Warner, Meeker and Eells (1949); Allen (1956); Bowman and Matthews (1960)

-Need of help at home: Warner, Meeker and Eells (1949); The Canadian Research Committee on Practical Education (1950)

-Motivational climate of the family: Cope (1975); Ceha (1972); Kettering Foundation (1979); Wrenn (1967); Cervantes (1966)

-School adjustment: Schreiber (1967); Greene (1966); United Community Services of Greater Vancouver Area (1970); Lichter (1962)

-Academic skills: Bayer (1976); Summerskill (1962)

-School achievement: Felton and Biggs (1977); United Community Services of Greater Vancouver Area (1970)

-Motivation of the student: Summerskill (1962); The Canadian Research Committee on Practical Education (1950)

These factors will be incorporated with varying emphasis, in the present study.

CHAPTER IV

METHODOLOGY

Selection of Variables

The selection of the variables in this study stemmed from two primary criteria:

(a) Student dropouts constitute a real problem in Venezuelan secondary schools.

(b) The phenomenon of student dropouts has been studied by many scientists in the past in other countries, and a number of influential factors were identified.

A "dropout" will be represented in the present study by the dependent variable, "Potential Dropout-Expectation", resulting from a prediction made by the student. This prediction will be made from two points of view:

(a) Student's prediction in terms of his own criterion.

(b) Student's prediction in terms of his projected parents' opinion.

These two kinds of prediction for the same main variable, "Potential Dropout-Expectation", have been considered as two different approaches in the process of gathering data, statistical analysis and interpretation of the results. They represent the same factor "dropout" as two sides of the same coin.

The factors that have been treated as independent variables can be grouped as follows:

Personal Factors

Personal factors are those directly related to the personal identification, psychology and academic skills of the student.

These are:

-Sex

-Age

-Future career

-School adjustment

-Student's motivation

-Mathematic skills

-Speed reading and comprehension

-Habits of study

Family Factors

Family factors are those directly related to the student's family. These are:

-Size of family

-Parents' occupation

-Parents' educational level

-Career orientation by the parents

As noted previously, the selection of these variables was not based fundamentally on the personal criterion of the author but on the criteria of previous researchers who were concerned with the same problem and the identification of influential factors.

The fact that many of these factors were not considered by these investigators as significant causes of dropout did not preclude removing them from this study. The reason is that the Venezuelan student is living in a social, political, school and family context that differs from the context of those countries where the studies were carried out. Further,

to compare the results of this study with those that have been obtained in other countries will benefit present and future investigations. With the selection of these factors, the author does not assume that the list is exhaustive. Rather, the factors are presently selected as those currently identified as the most relevant and likely to bear directly on the problem.

Instruments used in the Study

To collect data, a series of questionnaires and tests were selected according to the following criteria:

-the kind of data required.

-the environment where the study should be made.

-all instruments should be available in Spanish and standardized for application in Venezuela.

The instruments used were:

For the Prediction Variable

A questionnaire named "Questionnaire of Prediction" was applied to collect data about possible dropout-expectation (see Appendix). The following criteria were considered:

1. The questionnaire was designed to collect data concerning predicted dropout according to personal and family points of view. For this purpose the questionnaire was divided into two parts as follows:

(a) Student's prediction

(b) Parents' prediction

2. In order to help the student provide a more accurate prediction, each part of the questionnaire contained a certain number of questions

which compelled the student to think of different approaches to the problem, so to give more balanced answers (values of prediction). This procedure lead the student to reflect on some aspects which could be among those that favored or hampered the predicted length of his studies.

For the Correlational Variables

Individual and Family Information. A questionnaire was applied to collect data about: sex, age, student's future career, size of the family, parents' occupation, parents' educational level and career orientation by the parents (see Appendix).

Academic skills.

(a) For Speed Reading and Comprehension. The "Test de Lectura" by Juan Carlos Garelli (1979) was used. This test consists of a reading selected for students of the first level of secondary school and measures the number of words read by the student per minute and the degree of comprehension obtained.

(b) For Mathematic Skills. The "Test de Aptitudes Diferenciales" by Ernesto Fedón (1979) was administered. This test is based on the Thurstone's theory and measures a student's numerical and abstract reasoning skills.

(c) For Habits of Study. The test "Habitos de Estudio" of the Universidad Javeriana de Bogotá (1978) was applied. This test provides a general index on habits of study and another sub-index related to certain techniques in the areas of readings, such as notes, order, capacity of concentration and distribution of work.

Psychological factors.

(a) School adjustment and Family adjustment. The test used was "Test de Ajuste de Personalidad para Adolescentes" by Centro de Orientación "La Salle" (1979). This test is an adaptation from the original Bell questionnaire (1964) and consists of 45 multiple choice items. The test measures a general adjustment of the subject and his particular adjustment in the family and school, and health and emotional areas. For the purpose of this study, only school and family areas were taken into consideration.

(b) Student's motivation. The "Test de Motivación para el Estudiante" by Ernesto Fedón (1979) was used. The instrument measures the general motivation of the subject toward studying, his readiness toward the school and his reaction to rewards or punishments.

It should be noted again that all instruments have been adapted and standardized to be used in Venezuela. The experience obtained through their frequent use in different schools of the country attests to their reliability.

Population

The secondary school of Venezuela includes five years of study on two different levels: The Basic Cycle and the Diversified Cycle. The Basic Cycle consists of the first three years or grades while the Diversified Cycle prepares a student directly for higher studies or technical careers.

It should be pointed out that this study is considered by the author as exploratory and carried out with a small student population. Nevertheless, an effort was made to guarantee a certain degree of generalization of results. These were some of the factors considered:

The Choice of the Population (Secondary School)

(a) It should be a public school administered directly by the Ministry of Education since:

-the rate of dropout is a little greater in public schools than in the private schools.

-eighty percent of the number of students who attend day secondary schools are in the public sector.

(b) It should be a coeducational school since sex is a variable in the study (all public schools have this characteristic).

(c) It should be a day school because in Venezuela night secondary schools are only for adults and school attendance is not compulsory.

(d) It should be located in a region in which the residents belong to the middle class or to the lower middle class, because most of the students of public secondary schools in Venezuela belong to these socio-economical levels.

(e) It should be a school having those conditions that are considered as basic for a normal management by the Ministry of Education.

(f) It should be a school with a minimum of three hundred students in the first grade. This would permit obtaining a complete set of data from two hundred students, the number chosen for the study.

(g) It should be organized according to the standardized procedures since schools organized according to other systems are considered as experimental schools.

(h) It should be a school with a dropout rate similar to most of the public schools in the country.

By adhering to these characteristics, the study would maximize the generalization of results.

The Selection of the School

The selection was made according to the characteristics previously established. Information was provided by the Departamento de Apoyo Docente of the Ministry of Education. The school selected for the study was the "Liceo Hermano Juan" in Barquisimeto, a city in the center of the country (Population 400,000).

"In Situ" Conditions of the School

Personal contact with the principal of the school as well as with the other members of the staff was necessary. During a successive number of interviews with the principal, the following points were discussed:

(a) The purpose of the study indicating some of the main objectives.

(b) The importance of the study for the school and for Venezuelan education in general.

(c) The method in which the study would be carried out.

(d) The kind of collaboration that the school authorities could provide for the study.

After a few days, a meeting with the administrative staff took place to facilitate the following points:

(a) An explanation by the principal about the motive of the meeting.

(b) An explanation by the author about the purpose of the study and its objectives and the manner in which the study would be carried out. Some additional points were specifically emphasized, such as:

-the scientific nature of the investigation

-the study was privately supported

-the success or failure of the study would depend, to a large extent, on the collaboration of the institution.

After answering many questions, the conclusion was reached that a meeting with the teachers that would be directly involved in the study was necessary.

A meeting with the teachers, the administrative staff and the author took place a few days later. After a discussion of some general aspects of the study that had been treated in the preceding meetings, some essential points were analyzed:

(a) The number of hours required for the study

(b) The elaboration of a schedule for normal development of the study which would minimize possible interference in the management of the school

(c) The possibility of using those rooms that offered maximum advantages from the point of view of light, temperature, size and quietness

(d) The necessity of avoiding any comment about the study with the students

(e) The necessity of individual and collective collaboration for the success of the study.

Participants

Six classes in the first year of high school amounting to a total of 222 students were chosen; however, only 200 performed all tests and questionnaires. This group (200) is considered as the sample of this study.

Characteristics of the Sample

The students came from different elementary schools of the region and were distributed in different classes as follows: Class A, B, C, D,...; using as many classes as necessary to complete the total number of students alloted to the school. Each class had 37 students.

It is useful here to point out certain criteria taken in mind by the administrative staff to group the students into different classes.

These are some of them:

1. Sex: The number of males and females per class should be about the same.
2. Age: The youngest students are placed in those classes that correspond to the first alphabetic letters, whereas the oldest are grouped in the last ones.
3. Stature: The smallest students are placed in the classes that correspond to the first alphabetic letters, whereas the tallest are grouped in the last ones.
4. Special cases: Special cases related to age, stature and behavior are assigned by the administrative staff together with the orientation Department.

The 200 students who took part in this study belong to the classes D, E, F, G, H and I.

Collection of Data

As previously stated, the collection of data was carried out through the questionnaire and tests according to the schedule approved by the staff The process took place from November 5th to the 15th, 1980.

-the instruments were sharply printed

-all the questionnaires and tests were administered by the author of the study.

-each of the seven instruments contained precise instruction giving the student the necessary information to perform it appropriately. However, additional explanations were given by the author in each case.

-each instrument was administered in a different hour; however, when the tests were less than 20 minutes long, two of them were applied during the same period. No more than two tests were administered to the same group during the same day.

-the students were unaware of the content of the tests or questionnaires. The author carefully avoided comments before or after the testing process.

Special note should be made concerning the procedure used in the administration of the Questionnaire of Prediction. As it was mentioned before, the questionnaire has two different parts and each part contains several questions (see Appendix). During the administration, the following procedure were adhered to:

1. The questionnaire was answered anonymously.

2. Each question was carefully read by the author and received complementary explanations. Then a few seconds were given to the students to think over and answer the question.

3. The questionnaire was administered to all students during the final day of testing.

For those students who were absent during the regular testing a special schedule was prepared.

The test scores were carefully recorded in the student lists. Finally, the school administrators were notified that they would receive a complete report of the results of the study as well as appropriate recommendations.

CHAPTER V

PRESENTATION OF THE NUMERICAL RESULTS

General Presentation

The presentation of the numerical results will be the object of the present chapter.

The data collected from the sample of 200 Venezuelan subjects will be grouped, for the sake of clarity, into three sections.

Group A: General Information

Group B: Academic and Psychological Behavior

Group C: Prediction of School Perseverance

To simplify references to the variables implied in the numerical presentation, it seems advantageous to give each of them a simple symbol representing it throughout the account. (See Table of Contents.) When a variable is not the immediate result of a test or of a questionnaire, but is inferred from one or many of the direct results, it is identified as a sub-set.

Before examining if the indications gathered in both Groups A (General Information) and Group B (Academic and Psychological Behavior) are connected in one way or another with the problem of dropout from secondary school, and if the C Group offers in itself significant information, it is useful to determine if the six sub-groups (classes D, E, F, G, H, I) constituting the whole group are sufficiently similar and homogeneous on the dropout variable (Lowest Score of S-Students' Prediction and P-Parents' Prediction).

Table 10 shows the distribution for the 200 subjects.

Table 10. Distributions of "Lowest Scores" in the Six Sub-Groups.

Classes	Years 1	2	3	4	5	
D	1	7	19	4	4	35
E	4	9	15	4	2	34
F	2	5	22	1	3	33
G	2	5	17	4	7	35
H	4	5	16	2	2	29
I.	5	8	16	4	1	34
	18	39	105	19	19	200

This table gives a $\chi^2 = 17.19$ for df = 20, showing no significant difference on the point of perseverance. Hence it is possible to assume the homogeneity of the whole sample.

Other considerations about the internal statistical conditions of the sample and its results will be given incidently in studying the different variables examined.

Numerical Presentation of the Variables in "Group A" (General Information)

A1: Sex

The distribution of the 200 subjects with regard to sex was 53% male and 47% female and it was closely representative of the sex composition in the high school. Table 11 shows the lowest scores given by boys and girls in the prediction of perseverance.

Table 11. Prediction of Perseverance

Lowest Scores

Sex \ Years	1	2	3	4	5	
M	11	19	54	12	10	106
F	7	20	51	7	9	94
	18	39	105	19	19	200

$r = .0061$ (biserial correlation)

In such a situation, it can be interesting--independently of the above finding--to put a null hypothesis between sexes on the problem of dropout. The normal way to verify the hypothesis in such a case is through establishing the χ^2. It was calculated and the result is $\chi^2 = 1.65$ for df = 4, which is not significant. The null hypothesis stating that no differences would be found on scores indicating perseverance in high school as a result of sex was supported.

A2: Age

Table 12. Age of the 200 Subjects

Years old	No.
18	2
17	3
16	12
15	37
14	77
13	62
12	7
	200

The age distribution is given in Table 12. Taking "12 years old" as 12.5, and proceding this way for each group, the following statistics were established:

$\bar{X}$ = 14.51

Mdn = 14.90

Mo = 14.50

s = 1.08

A "pie graph" of the age distribution is presented in Figure 4.

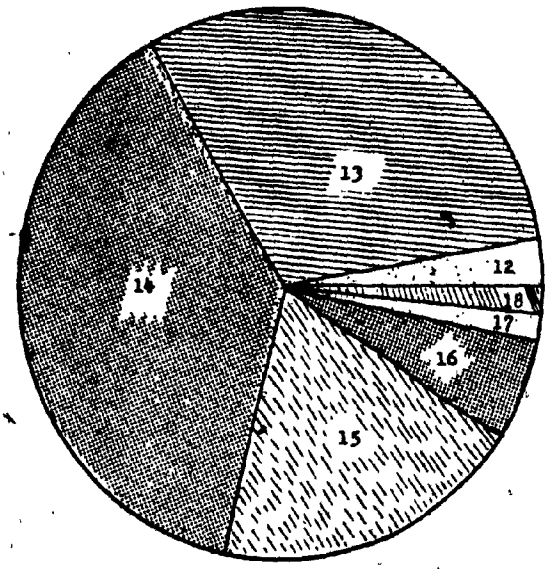

Figure 4 . Ages in the sample

One may think that the students are quite old for first year of high school pupils. Three remarks may be made here. First, as it was said before, classes A, B, C, which were younger children, were not included in the sample. Second, ages of first year students are generally higher in public than private schools. Third, many students begin primary school at an advanced age.

A3: Size of the Family

More than one question was asked of the research subjects about the number of persons at home, which seems to be, as it was said before, a factor to be considered in a school perseverance study. Each pupil was asked the following:

-size of the family

-number of brothers and sisters

Evidently, there was some repetition in the questions, but they permitted crosschecks. In fact, the values retained were those expressed as "Size of the Family". Frequently in Venezuela the "family" extends itself beyond "parents and children". It may include grand parents or aunts or cousins or someone not even related. In the present study, it is the number of persons at home which is the determining factor. As it is normal in all similar cases, the distribution is positively asymmetric. On this subject of the size of the family for the 200 participants in the research, the major calculated statistics were:

$$Mo = 7$$

$$\overline{X} = 9.21$$

$$s = 3.16$$

Figure 5 shows the graphic distribution.

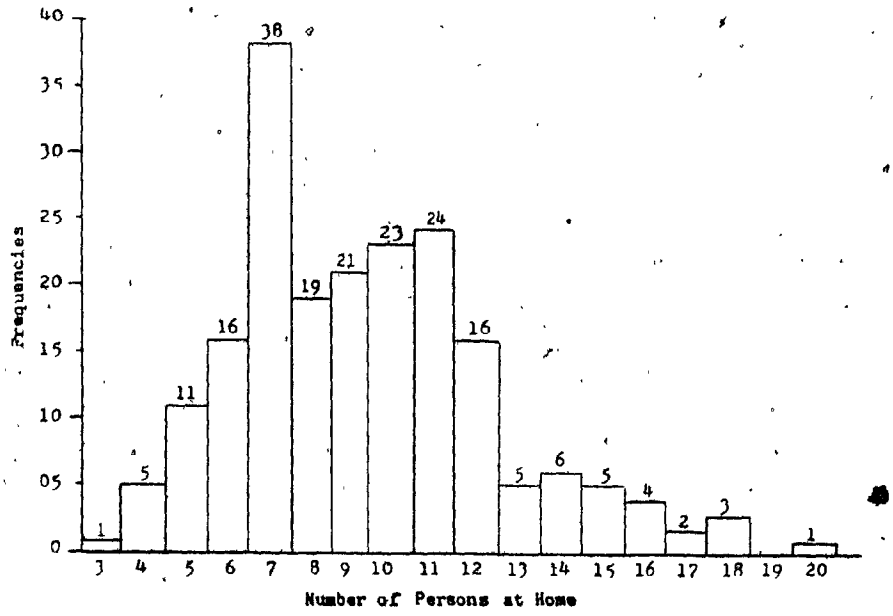

Figure 5. Size of the Family

A4: Parents' Occupation

Both mother's occupation (A4a) and father's occupation (A4b) were asked from the subjects of the sample. One hundred and fifty four of the one hundred and ninety who answered the question concerning the mother's occupation (81%) said "Home".

Evidently, father's occupations were more diversified. Nevertheless 58% of them (100 of 173) were said to be "workers".

The following bar graph shows the fathers' occupational pattern.

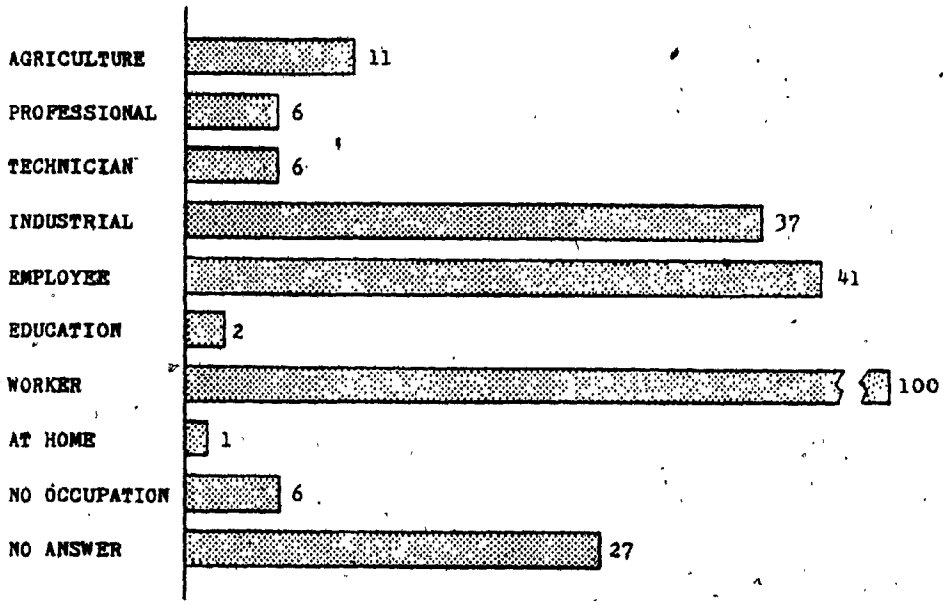

Figure 6. Fathers' Occupation

Some attempts were made to form groups out of these categories, but it was noted that any such combination would be artificial and inconclusive.

A5: Parents' Educational Level

The mother's educational level is generally somewhat low, when existing at all. And the fathers' educational level is not much higher as it can be seen in Table 13.

Table 13. Parents' Educational Level (%)

	MOTHERS	FATHERS
HIGHER EDUCATION	4	4
HIGH SCHOOL	8	12
ELEMENTARY SCHOOL	52	59
NONE	36	25

No answer was given relatively to 4 mothers and to 23 fathers.

Numerical Presentation of the Variables in "Group B" (Academic and Psychological Behavior)

B1: Mathematic Skills

The distribution of results for the 200 subjects is given in Table 14.

Table 14. Mathematic skills

Scores	No. of Subjects
11+	4
10	5
9	6
8	10
7	19
6	23
5	39
4	37
3	23
2	25
1	9
	200

Out of a maximum possible score of 15, the results show rather low scores, with a clear positively asymmetric distribution. The relevant statistics are:

$Mo = 5$

$\bar{X} = 4.89$

$R = 14$

$s = 2.40$

B2: Reading Skills

This variable is the result of the combination of scores from two subtests:

B2a: Speed of Reading

B2b: Comprehension of Reading

Equal importance was given to each of the two. Both subtests were standardized for Venezuela. Nevertheless the "z-scores" of all results (Speed of Reading and Comprehension of Reading) were established from the marks obtained through the tests. The combination of scores was then possible (maximum score = 20). The following polygon of frequencies reflects the situation of variable B2.

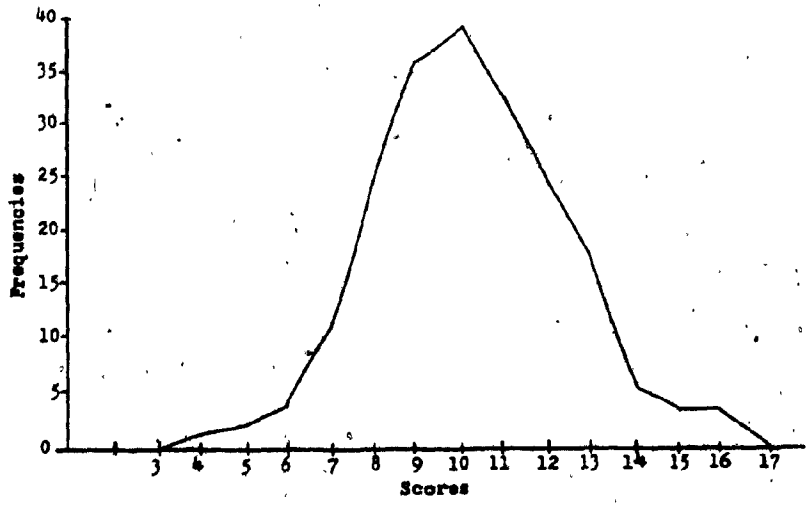

Figure 7. Reading Skills

The graphic is close to a perfect normal Gaussian curve of distribution. Additional information was gleaned from the mean and standard

deviation for both subtests and for the combined scores:

	Speed of Reading	Comprehension	Combined Scores
$\bar{X}$	157.10	3.21	10.17
s	52.25	1.47	2.13

B3: Habits of Study

The range of results extended from 3 to 41. The dispersion is truly noticeable, as can be seen in the following Table 15. Two remarks are relevant: (a) As the best results are the lowest scores, 0 being the ideal, our class intervals begin with these small values; (b) The score is missing for one subject.

Table 15. Habits of Study

Scores	No.
0- 4	7
5- 9	16
10-14	34
15-19	45
20-24	37
25-29	35
30-34	15
35-39	8
40-44	2
	199

From the original (non-grouped) data, the mode is 16 (n = 16); the median is 19 and the mean is 19.46. The standard deviation equals 8.31.

B4: School Adjustment

Although the importance of the independent variable "School Adjustment"

will be discussed later, special treatment of the results is in order. The scores of the pertaining test are distributed in the sample from 3 (highest adaptation) for 1 subject, to 20 (lowest adaptation) equally for 1 subject, with the mode being 11 (28 subjects). A maximal adjustment will give a "0" score.

Table 16. School Adjustment

Scores	No.
3- 4	7
5- 6	14
7- 8	30
9-10	43
11-12	45
13-14	46
15-16	11
17-18	2
19-20	1
	199

Table 16 shows a global view of the situation. The results are missing for one subject.

$\bar{X} = 10.31$

$s = 3.07$

Though the range of the test scores is 17, as can be inferred from the previous information (20-3), it may be useful to say that 154 of the 199 subjects (77.39%) are in a 7-point interval (14-8), as is clearly visible in the simple percentage graphic that follows:

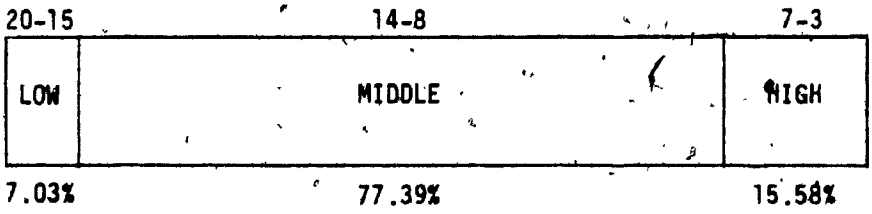

Figure 8. School Adjustment--Percentage graph

B5: Student's Motivation

In the case of the Student's Motivation test, the higher scores correspond to a better motivation. For our sample, the scores range from

22 to 39, with the theoritical maximum being 45. The data are presented in the following Table 17 and Figure 9.

Table 17. Student's Motivation

Scores	No.
38-39	4
36-37	12
34-35	20
32-33	54
30-31	58
28-29	20
26-27	22
24-25	9
22-23	1
	200

Table 17 shows that the distribution is somewhat leptokurtic since 112 cases in 200 (56%) are found in the two intervals 30-31 and 32-33. This is more evident in the histogram of Figure 9. The mean and the standard deviation for the distribution are:

$\bar{X} = 31.21$

$s^2 = 3.13$

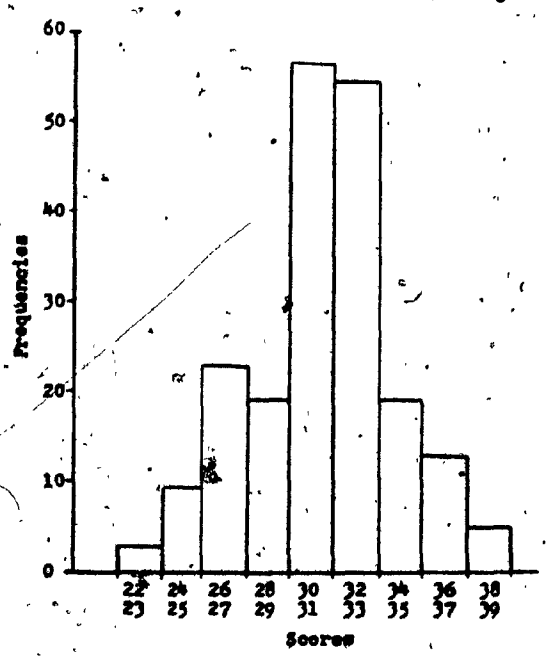

Figure 9. Student's Motivation

B6: Family Adjustment

In the questionnaire probing Family Adjustment, as in School Adjustment (B4), the low scores coincide with high adjustment. In the two sets of scores the range are quite similar: from 20 to 3 in B4, and from 23 to 0 in B6. But these are only gross comparisons. In fact, when B4 gives a fairly symmetric (though leptokurtic) distribution (see Figure 8), there is quite a negative asymmetry in B6. Figure 10 shows the distribution of this later variable:

Table 18. Family Adjustment

Scores	No.
0- 2	17
3- 5	31
6- 8	56
9-11	36
12-14	25
15-17	19
18-20	11
21-23	5
	200

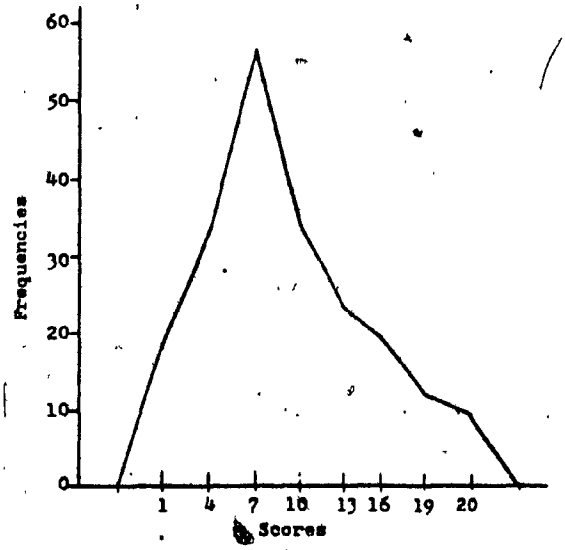

Figure 10. Family Adjustment

More than 50% of the subjects are concentrated in the first three upper intervals (see Table 18). The mode (from the original individual distribution) is 6 (24 subjects), the median is 8 and the mean is 9.26. The differences between the measure of central tendency are characteristic of an asymmetric distribution, clearly revealed by the polygon of frequencies (see Figure 10). If the distribution seems to be positively asymmetric,

it is because the scores are placed to comply with the mathematical coordinate theory. But one must remember here that, in this particular case, the lower the scores, the better the situation.

The standard deviation of the distribution is 5.18, calculated from the original individual scores.

B7: Future Career Desired

It was not possible to gather an answer from every pupil on this variable. One of the reasons for this was obvious. An important portion of first year students in high school do not know what they will do in the future, and the question is not interesting for them. But the answers received revealed high ambitions among the young pupils. They are given here in percentages, for both boys and girls, together with their parent's occupations, as gathered from variables A4a and A4b. This form permits a ready comparison (see Table 19).

Table 19. Future Career Desired by the Students Compared with their Parents' Occupation

	Mothers' Occupation	Future Career Girls	Fathers' Occupation	Future Career Boys
AGRICULTURE	0	0	6.3	0
PROFESSIONAL	1.0	50.0	3.5	50.9
TECHNICIAN	0	22.7	3.5	20.8
STOREKEEPER	0.5	0	0	0
INDUSTRIAL	1.0	2.3	21.4	3.8
EMPLOYEE	7.4	0	2.3	0
EDUCATION	2.1	25.0	1.1	24.5
WORKER	5.3	0	57.8	0
HOME	81.1	0	0.6	0
NO OCCUPATION	1.6	0	3.5	0

The differences between parents' occupation and the future career desired by their offspring are obvious. They are even more manifest when the youngsters' choices and the occupations of their own parents are directly compared.

Table 20. Comparison between Boys' and Girls' Aspirations and their Parents' Occupation.

	Different Aspiration from Corresponding PARENTS' Occupation	Same Aspiration from Corresponding PARENTS' Occupation
BOYS	98%	2%
GIRLS	97.5%	2.5%

B8: Speaking about a Career

If the children speak frequently of their future career with their parents, it is probable that this will have an effect on their projected perseverance in school. What were the answers of our 200 subjects about the frequency of such a type of conversation? Table 21 shows the results.

Table 21. Speaking about a Career

	No.	%
Frequently	61	30.5
Once in a While	77	38.5
Rarely	36	18.0
Never	26	13.0
	200	100.0

Numerical Presentation of the Variables of "Group C" (Prediction of Perseverance)

It was indicated earlier that there are no less than 16 variables in Group C, which is more than in Groups A and B combined. But there is an essential difference between these groups and their constituent variables. In A and B, the elements are specific independent variables; in C, on the contrary, the elements are only different aspects of what is in reality one dependent variable, the prediction of perseverance or, conversely, the prediction of dropout from high schools.

In this section, the aspects relevant to the prediction of perseverance from the personal point of view of the students will be presented first. Secondly, the elements from the idea that the pupils have of their parents' thoughts about perseverance through high school for their children will be shown. Finally, one synthetic numeral measure will be formed from all the preceding considerations to represent the dependent variable consisting of:

(a) S1-8: Students' Prediction

(b) P1-6: Parents' Prediction

(c) C1-2: Comprehensive Prediction--Synthesis

S1-S8: Students' Prediction

For each of the six subvariables probing students' thinking about their perseverance in high school, there is a value ranging from 1 to 5 corresponding to the grade that the student wants or hopes to attain. Table 22 gives the results based on the following topics:

S1 - Student's Prediction from Future Career

S2 - Students' Prediction from School Background

S3 - Students' Prediction from Parents' Occupation

S4 - Students' Prediction from Lack of Money

S5 - Students' Prediction from Love of Study

S6 - Students' Prediction from School Adjustment

Table 22. Students' Prediction of Perseverance.

(Grades 1 through 5)

	1	2	3	4	5
S1	3	6	81	21	89
S2	6	10	70	43	71
S3	9	19	97	33	42
S4	8	16	95	37	44
S5	4	4	57	27	108
S6	4	4	69	30	93

Theoretically, one might hope for a better spread among five divisions, but the object of the investigation must always be kept in mind: prediction of high school grade perseverance. It is perhaps natural that only a few students answered in 1 or 2. That the number is greater in 3 than in 4 can also be readily explained. First, the third year is the end of the Basic Cycle; second, and more important, many undecided students must have indicated 3 as a somewhat central and imprecise spot. The values in column 5 indicate the maximum perseverance. Substracting all values in column 5 from 200 hence signals the probable dropout situation.

The general descriptive statistics for the six aspects studied are:

	Mo	Mdn	$\bar{X}$	s
S1	5	4	3.96	1.05
S2	3	4	3.81	1.01
S3	3	3	3.40	1.04
S4	3	3	3.46	1.04
S5	5	5	4.14	1.03
S6	5	4	4.01	1.03

At first sight at least, an important indication of the preceding statistics is the stability of the dispersion as given by the standard deviations.

A synthetic measure for students' prediction, resulting from the values given for the specific six subvariables seems useful and easy to calculate. For each subject, the mean of the six numbers inscribed, or more simply, their sum, can be found without any statistical objection (since the standard deviations are equivalent). This was done and Table 23 shows the result.

Table 23. Students' Prediction of Perseverance (Total)

Scores	No.
28-30	36
25-27	47
22-24	42
19-21	26
16-18	39
15 or less	10
	200

A negative asymmetry seems clear. A candidate who is "sure" or "desires very much" to persevere through all the years of the high school will inscribe the score "5" every time and his total will be, 6 x 5 = 30. On the other hand, for reasons previously stated,

some pupils will always put the score "3", with the total 6 x 3 = 18
For the global S7, the major statistics are: $\bar{X}$ = 22.81; s = 4.88.

In most research, the preceding synthetical value--the sum or mean of all partial scores--will be the most appropriate, and many times the only one. But this case seems special. It is necessary to know if the pupils will project perseverance in their school attendance. It will be sufficient if one cause interferes to create a dropout of an otherwise continuing student. The six approaches constitute a chain and it can be said that the strength of the whole chain is the strength of the weaker link. For example, if two subjects A and B have respectively, for the six answers;

A: 4 3 4 3 4 3

B: 5 3 1 5 3 4

the total is 21 in both cases, but the situation is not the same at all. So, it seems that a perhaps better general information than the sum or the mean is the lowest of the six values inscribed in S1 through S6. This new "variable" given by each individual's lowest score was name S8. Here is how it was distributed. (Table 24.)

Table 24. Students' Prediction of Perseverance (Lowest Score)

Scores	No.
5	19
4	22
3	111
2	33
1	15

In this distribution of lowest scores, the mode and the median are evidently 3; for the other major statistics:

$\bar{X}$ = 2.98

s = 0.97

P1 - P6: Parents' Prediction

All that has been said about students' prediction in the above section can be applied, mutatis mutandis, to the present parents' prediction.

The 200 subjects of the sample were asked to think about their parents' situation and how it might affect their perseverance through high school. Answers were given to four questions which constituted the subvariables P1 - P4:

P1: Parents' Attitude

P2: Need of Help

P3: Parents' Knowledge of Students' Difficulties

P4: Economical Factor

The answers, going from 1 to 5 in each case, are given in the following table:

Table 25. Parents' Prediction

Hope to go through grade

	1	2	3	4	5
P1	4	4	45	23	124
P2	2	8	59	30	101
P3	4	10	61	35	90
P4	3	6	56	24	111

It is clear that the general trend is more optimistic than in the series "S". The principal statistics for each of the subvariables

read as follows:

	Mo	Mdn	$\bar{X}$	s
P1	5	5	4.30	1.00
P2	5	5	4.11	1.07
P3	5	4	3.98	1.06
P4	5	5	4.17	1.03

Exactly as in the case of S1 - S6, all the standard deviations are between 1.0 and 1.1 indicating high stability of the dispersion.

Two global variables for the section will be established again: "sum-mean" and the special "lowest-score".

The four variables P1 - P4 combined give the following table (which will represent "Parents' Total Prediction" or P5):

Table 26. Parents' Total Prediction

Scores	No.
20	65
18-19	32
16-17	40
14-15	20
12-13	30
11 or less	13
	200

statistics are: $\bar{X} = 16.57$

$s = 3.41$

Table 26 shows 65 students (32.5%) who think that there will be no obstacle from their parents in finishing high school. This proportion is not far from the real perseverance in Venezuela, as noted in the first part of this study (perseverance of 36% in 1979). For this "variable" P5, the two principal

An additional list of scores representing the whole parents' prediction image was calculated by taking, for each subject, the lowest of the four values he gave for the four subvariables. This distribution of "lowest scores", now named P6, is as follows:

Table 27. Parents' Prediction (lowest score)

Scores	No.
5	65
4	28
3	83
2	16
1	8
	200

The mean for this distribution is 3.63, and the standard deviation 1.13.

C1 - C2: Prediction--A Synthesis (Focusing on the Dependent Variable)

All the preceding considerations in (a) and (b) were oriented toward the formation of a single global variable suitable to represent the perseverance prediction, which is the dependent variable in this research.

Values cumulated in S7 (sum of S1 - S6) and P5 (sum of P1 - P4) are intrinsically and statistically homogeneous; they can be readily combined to give the qualified numerical aspect of the variable in question. Table 28 shows the combined S7 + P5 results. For this distribution,

$\bar{X} = 39.20$

$s = 7.57$

with the statistics being calculated from the individual 200 scores, and

Table 28. Students' and Parents' Predictions Combined

Scores	No.
-50	19
45-49	35
40-44	55
35-39	37
30-34	38
25-29	9
20-24	4
15-19	1
10-14	2
	200

not from the present table. Whatever the estimation of total prediction that may be given by the preceding sum distribution, the observations of page 63 compel us to consider the lowest score of both S and P series as the surest indication of the possibility of perserverance in high school. The distribution C1 (Sum) will not be discarded, but rather used when the circumstances seem to call for it. The emphasis will be put on C2 or the lowest score of S8 (all S's) or of P6 (all P's). This C2 will be considered, most generally, as the prediction variable in this research. The C2 prediction was distributed as follows:

Table 29. Prediction using Lowest Score

Score	No.
5	19
4	19
3	105
2	39
1	18
	200

Simply stated, 90.5% of the sample do not expect to graduate from high school but rather to drop out at some point along the way.

The fact that 52.5% of the population have the same score is not very interesting statistically, especially for a refined analysis,

but one must cope with the reality of the sample. For this distribution, some interesting values are:

Mo = 3

Mdn = 3

$\bar{X}$ = 2.91

s = 1.01

Since the numerical aspects of the different independent variables have been presented and the dependent variable has been established, the statistical analysis of the data will now follow.

CHAPTER VI

STATISTICAL ANALYSIS

Chapter V dealt with the presentation of the numerical data obtained from the 200 subject sample. The present chapter will examine the statistical relations among the variables. It will consist of three parts, the first taking into consideration only the dependent variable and its elements, with the latter two studying the relations between the independent and dependent variables.

Some Internal Relationships in "Group C"

Relationships between Sums and Lowest Scores

In the preceding chapter, both sums and lowest scores were studied. For intrinsic but important reasons, it was stated that the lowest score of all subvariables in the perseverance prediction investigation was the most appropriate expression of this perseverance. So, it must be clear that "C2 - Prediction-Lowest Scores" is considered as the primary dependent variable in this analysis. However, as it is sometimes useful, like a complementary information, the sum of the subvariables "C1 - Prediction-Sums" will not be entirely neglected.

The six variables involved are:

S7: Students' Prediction-Sums

S8: Students' Prediction-Lowest Scores

P5: Parents' Prediction-Sums

P6: Parents' Prediction-Lowest Scores

C1: All Predictions-Sums (S7 + P5)

C2: All Predictions-Lowest Scores (of S8 and P6)

Among these variables, fifteen correlations are possible ($\frac{6 \times 5}{2}$), but some would be worthless for the purpose of the present study. Those which seem to be of interest are divided into three groups.

First Group

Between S7 and S8, r = .74

Between P5 and P6, r = .85

Between C1 and C2, r = .67

These three coefficients give the correlation inside each of the three sub-groups of variables S, P and C. They are an indication of the links--whatever their nature--between sums and lowest scores.

Second Group

Between S7 and P5, r = .70

Between S7 and C1, r = .95

Between P5 and C1, r = .89

The purpose of these correlations is to establish the connections between the three "sum variables". It will be interesting to compare them with the results in the third group, considered as more important.

Third Group

Between S8 and P6, r = .47

Between S8 and C2, r = .95

Between P6 and C2, r = .58

This group gives the relationship between "low-score variables".

Which of these nine r's are statistically significant? The difficulty in establishing such a type of trustworthy measure in the case of the coefficient of correlation is well recognized. Nevertheless, as a

first step, the traditional s_r will be found, and, in a second move, Fisher's "z-coefficients" and their s_z's, which are much more statistically satisfying, will be established.

An introductory remark may be useful. Generally speaking, a coefficient of correlation is large or small, not in itself, but in relation to the study being undertaken and the variables included. This interpretation is not strictly a statistical one; it belongs to rational discussion. The only thing that statistics can do is to determine if the r's found are positively or negatively significant.

In the present research, with rare specified exceptions, it is easy to establish a threshold for a significant coefficient; two in fact may be used, one for the level of confidence at $p < .01$ (ordinarily considered here) and one for the level of confidence at $p < .05$ (signaled when $p < .01$ is not reached). So, in the study of r and s_r, the correlation will be significant

at $p < .05$ if $-.14 \geq r \geq .14$

and at $p < .01$ if $-.18 \geq r \geq .18$

Since all nine coefficients found are positive, the lowest being .47, it is clear that they are all significant at the level $p < .01$. Table 30 provides a complete and more specified look at the results.

Table 30. Relationship between Sums and Lowest Scores

Variables	r	s_r	Significant
S7 and S8	.74	.03	Yes, $p < .01$
P5 and P6	.85	.02	Yes, $p < .01$
C1 and C2	.67	.04	Yes, $p < .01$
S7 and P5	.70	.04	Yes, $p < .01$
S7 and C1	.95	.01	Yes, $p < .01$
P5 and C1	.89	.01	Yes, $p < .01$
S8 and P6	.47	.05	Yes, $p < .01$
S8 and C2	.95	.01	Yes, $p < .01$
P6 and C2	.58	.05	Yes, $p < .01$

As previously stated, the Fisher's "z-coefficients" are more satisfactory in the case of correlations because they distribute themselves following a normal curve, which the r's do not. In the case of the z's (given by the Fisher's table for each corresponding r), the s_z (n = 200) is always the same, since neither z nor r intervene in the formula of s_z. In fact $s_z = .07$. In the case of the Fisher's coefficient, the significant z is:

for $p < .05$: $-.14 \geq z \geq .14$

for $p < .01$: $-.19 \geq z \geq .19$

As for z = .14 and z = .19 where the r's are respectively .14 and .19;

it is seen that there is practically no difference between the two methods for determining the significance. Henceforth, therefore, it will not be necessary to determine the Fisher z's and corresponding s_z's.

A Case of Partial and Multiple Correlations

As previously noted, the "Students' Prediction" Group (S) consists of six different approaches (S1 to S6). Similarly, the "Parents' Prediction" Group (P) presents four aspects (P1 to P4). Are there internal influences among these subvariables?. What would be the influence of each one if the others were maintained statistically constant? Is there a possibility that a large dropout factor has been omitted? In fact, what is the total influence of the subvariables on the variable as a whole? Answers to such questions call for partial and multiple correlations.

On the other hand, is such a move important enough to embark upon a considerable amount of computation and calculation? The solution appeared to be a compromise.

For this purpose, section S was chosen with its six approaches (S1 to S6) and the total score (S7) giving the seven variables of this problem. One of the six student groups forming class "I" was taken as the present sample (n = 34).

The two essential questions were:

(a) What is the global influence of S1 to S6 on the "dropout situation"?

(b) What is the relative influence of each of these subvariables on the same problem?

To solve the first case, a multiple correlation must be established; to

answer the second interrogation, the calculation of the β coefficients is necessary. For each situation, a great number of intermediary values are indispensable.

First, every ordinary correlation coefficient among the seven variables must be calculated, followed by a certain number of partial correlation coefficients (35 in the only case of question "a"). Table 31 presents the fundamental intercorrelations.

Table 31. Intercorrelations among Variables S1 - S7

r	S2	S3	S4	S5	S6	S7
S1	.58	.39	.31	.66	.66	.76
S2		.57	.64	.74	.76	.88
S3			.60	.42	.40	.71
S4				.50	.50	.75
S5					.61	.81
S6						.83

Two remarks are in order at this time. First, for the sake of simplicity, the above table gives the coefficients with only two decimals, but for more accurate final results, all calculations were computed to at least four decimal points. Second, to see if this "sample within a sample" was representative, some coefficients were found for the 200 subjects; the differences were not significant.

The final result for R, the coefficient of multiple correlation for the seven variables of the present case, was R = .9969. Because of the size of the sample drawn from only one school, it is difficult to draw an absolute conclusion. The high correlations found indicate that these six variables (S1 to S6) are positive factors influencing the students' prediction of perseverance in school.

The establishment of the six β coefficients corresponding to S1 to S6 subvariables required even more partial correlation coefficients than R. The final results are:

	β
S1 - Future Career	.52
S2 - Academic Background	.28
S3 - Parents' Occupation	.73
S4 - Lack of Money	.64
S5 - Love of Study	.56
S6 - School Adjustment	.79

The intrinsic value of the β's is not very important here. It is their relationships which count. The higher a β ; the higher--and proportionally-- the relative influence of the subvariable on the variable. In this case, it seems that all the subvariables are valuable (all have positive β 's), but that S6 (School Adustment), followed closely by S3 (Parents' Occupation) and S4 (Lack of Money) are the most important factors. S2 (Academic Background) seems the least important factor (in the students' point of view). Table 32 synthesizes the situation.

Table 32. S1 to S6 and Respective β Coefficients

	β	% of Total	if S6 = 100	Approximate ratio of importance
S1	.52	15	66	2
S2	.28	8	36	1
S3	.73	21	93	3
S4	.64	18	81	2
S5	.56	16	71	2
S6	.79	22	100	3
	3.52			

Both questions "a" and "b" of page 73 are now answered, but it seems interesting to add another indication gathered in establishing R and the β's. In fact this new piece of information refers to one of the initial questions. What is the direct influence on S7 of each of the subvariables S1 to S6 when each is "freed" (statistically) from the influence of the others? This is a case of partial correlation of the 5th order (5 variables "stabilized"). Table 33 gives the results of this analysis.

Table 33. Correlation of S1 to S6 with S7

	Partial Correlation 5th Order	(Ordinary Correlation)
S1 and S7	.86	(.76)
S2 and S7	.58	(.88)
S3 and S7	.89	(.71)
S4 and S7	.89	(.75)
S5 and S7	.81	(.81)
S6 and S7	.89	(.83)

Note: For comparison, the ordinary coefficient of correlation between each subvariable and S7 is given in parenthesis.

The comparison between the two lists of coefficients is informative. There is no apparent change in the case of S5, but a remarkable increase for both S4 (14 points) and S3 (18 points) is noted. S2 registered a considerable drop (30 points).

Thus, the first indication (ordinary correlation) of the major importance of S2 Academic Background, in relation to the sum of S7 ($r = .88$), must be moderated (partial correlation = .58). With a less refined and delicate analysis than with the β coefficient, the partial correlations also give an order of importance of the subvariables.

Some Particular Correlations

This section will be very short. The chief reason is that such correlations among subvariables were not judged important in the pursuit

of the objectives of this study. Nevertheless, three particular cases seem somewhat useful:

1. Many correlations had to be established among subvariables in order to find the partial correlations, the multiple correlation and the β coefficients of the preceding section. These correlations are not repeated here.

2. Even if all the ten subvariables S1 to S6, and P1 to P4 were different, a type of internal verification is possible with some of them. The subvariables are:

S4: Students' Prediction - Lack of Money

P2: Parents' Prediction - Need of Help

P4: Parents' Prediction - Economical Factor

Evidently "Need of Help" is not necessarily a "Lack of Money"; the "Lack of Money" for students and their perception of an "Economic Factor" in the family which can hamper their school perseverance are not synonymous. Yet these three things are going in the same direction. A very low r in such a case would arouse suspicion. The correlation coefficients found were:

between S4 and P2, $r = .53$

between S4 and P4, $r = .51$

between P2 and P4, $r = .68$

Their positive nature is clearly showed by the s_r's which are respectively, .05, .05 and .04. If one thinks that the three coefficients of correlation are far from 1, it is important to remember that the subvariables are appreciably different, even if there is a certain affinity between them, particularly among the latter two (P2 and P4).

3. A comparison between each subvariable and the dependent variable seems to be of some importance. So for each subvariable S and P, the correlation coefficient with C2 was established. The results are grouped in Table 34.

Table 34. Correlation between the Prediction Subvariables and Perseverance

S1 - Future Career	.47
S2 - Academic Background	.54
S3 - Parents' Occupation	.74
S4 - Lack of Money	.65
S5 - Love of Study	.41
S6 - School Adjustment	.42
P1 - Parents' Attitude	.37
P2 - Need of Help	.35
P3 - Student's Knowledge	.51
P4 - Economical Factor	.43

A Direct Approach to the Dropout Problem

The best procedure for solving a problem is not necessarily the most sophisticated. In the analysis of the sample results, it seems that the direct examination of the answers to the ten subvariables S1 - S6, P1 - P4, is probably even more to the point than the calculation of the coefficient of correlation however useful it may be.

For each subvariable, a score of 5 indicated that the point considered was not a reason to drop out of school. So, it may be interesting to construct a list giving, in rank order, the causes of leaving school before the end of the fifth year. Table 35 shows this ordering.

Table 35. Reasons for Leaving School

Subvariables	YES	NO
S3 - Parents' Occupation	158	42
S4 - Lack of Money	156	44
S2 - Academic Background	129	71
S1 - Future Career	111	89
P3 - Student's Knowledge of Parents' Idea	110	90
S6 - School Adjustment	107	93
P2 - Need of Help	99	101
S5 - Love of Study	92	108
P4 - Economical Factor (Parents)	89	111
P1 - Parents' Attitude toward Perseverance	76	124

It is noteworthy that the above order of the subvariables is very close to that obtained in Table 34 at the end of the preceding section.

Looking at the same problem from a different perspective, it is possible to see what subvariables seem to cause early dropouts. Since the dependent variable of the whole study is derived from the lowest scores of the ten subvariables, it is possible to determine what subvariables are

principal contributors. Table 36 gives two indications for each subvariable in this regard: (a) Frequency when the lowest score is given no more than three times (otherwise the "lowest" score is telling nothing); (b) Frequency when the lowest score is given only one time by the subject.

Table 36. Subvariables Giving the Lowest Scores

SUBVARIABLES	FREQUENCIES	
	Lowest Score Mentioned up to 3 Times	Lowest Score Mentioned Only Once
S3 - Parents' Occupation	49	15
S4 - Lack of Money	48	12
S2 - Academic Background	22	8
S1 - Future Career	16	3
P3 - Student's Knowledge of Parents' Idea	16	5
S6 - School Adjustment	8	4
P2 - Need of Help	8	1
S5 - Love of Study	8	2
P4 - Economical Factor (Parents)	7	0
P1 - Parents' Attitude toward Perseverance	6	2

It can be readily noted that the order in Table 36 is exactly the same as in Table 35. The major importance of subvariables "S3- Parents' Occupation" and " S4 - Lack of Money" as causes of non-perseverance is hence emphasized.

into quantitative equivalents. Table 41 shows the corresponding dispersion diagram.

Table 41. Relationship between Speaking about Career and Perseverance

C2 - Perseverance

B8 - Speaking about a Career	1	2	3	4	5	
4 (frequently)	3	9	35	6	8	61
3 (once in a while)	7	16	43	6	5	77
2 (rarely)	3	8	14	6	5	36
1 (never)	5	6	13	1	1	26
	18	39	105	19	19	200

The coefficient $r = .14$ is positive and significant at the level $p < .05$ but not at the level $p < .01$.

Summary of Essential Correlations

The conclusions of this statistical analysis will serve as a prelude to the discussion that will follow. With this in mind, it was deemed useful to group into a single table the essential results of the preceding analyses. In each case, the name of each independent variable is given together with its correlation with "C2 - Perseverance" or the dependent variable. Table 42 shows the overall statistical significance of each correlation coefficient.

Table 42. Summary of Essential Correlations between C2 - Perseverance and the Correlational Variables

VARIABLES	r	SIGNIFICANCE LEVEL	
Group A		$p < .05$	$p < .01$
A1 - Sex	.01	NO	NO
A2 - Age	-.15	YES	NO
A3 - Size of the Family	-.11	NO	NO
A4 - Parents' Occupation	?	-	-
A5 - Parents' Education	.04	NO	NO
Group B			
B1 - Mathematic Skills	.06	NO	NO
B2 - Reading Skills	-.03	NO	NO
B3 - Habits of Study	.11	NO	NO
B4 - School Adjustment	.449	YES	YES
B5 - Student's Motivation	.450	YES	YES
B6 - Family Adjustment	.03	NO	NO
B7 - Future Career	?	-	-
B8 - Speaking about Career	.14	YES	NO

CHAPTER VII

DISCUSSION AND CONCLUSIONS

The purpose of this chapter will be to impart the implications of the particular set of results obtained by this study, pointing out those aspects that seem more relevant. A parallel between these results and other results that have been reported in the literature review will be established.

The same ordering of variables as followed in Chapters V and VI will be used in the discussion.

Preliminary Remark about the Results of the "Questionnaire of Prediction"

Table 35, Chapter VI, provides a list of reasons for leaving school. The list gives the results to the Questionnaire of Prediction. It is clear that this questionnaire was not primarily prepared for identifying possible specific causes of student dropouts but for obtaining data about a dropout prediction in general; however, the results suggest some interesting considerations:

(a) The subvariables S3 (Student's Prediction from Parents' Occupation), S4 (Student's Prediction from Lack of Money) and S2 (Student's Prediction from School Background), represent a reality seen directly by the students. It is the real students' opinion.

(b) The subvariables P2 (Parents' Prediction from Need of Help), P1 (Parents' Prediction from Parents' Attitude), represent the parents' opinion as projected by the students.

(c) In Venezuela, even the poorest wish the best for their children. They are always ready to sacrifice themselves for their children's future. However, the reality is clearly appreciated by the students and for this reason the parents' opinion, as projected by the students, doesn't represent as well as the students' personal opinion a real view of the problem.

(d) The additional subvariables were not studied in as much detail as those specified above. They are also not revealing to the same extent; and they occupy middle-of-the-road situations in the list. It will be sufficient to say that P3 (Parents' Knowledge on Possibility), which seems to have results comparable with the "S" subvariables, is the most student oriented of the four "P's".

(e) Two factors seem to be particularly relevant as possible causes of dropout:

-economic : represented specially by the subvariables S3 and S4 which, according with their formulation in the questionnaire, are intimately linked. These findings coincide with the results obtained by Warner, Meeker and Matthews (1960) and the Canadian Research Committee on Practical Education (1950).

-academic background: in this case has a broad sense and represents the global student school attainments necessary to go further. These results agree with the Felton and Biggs' point of view (1977) and the findings of Bowman and Matthews (1960).

Discussion

A1: Sex

After the study of the homogeneity of the sample with regard to sex (Chapter V), it was found that there were no differences between males and females as to predictions, and the correlation ($r = .01$) was not significant ($s_r = .07$). It is not possible here to confirm the results obtained by Dillon (1949); however the present results are very similar to those of Cummings (1949) and Halladay & Andrew (1958) in studies at the college level. The present research tends to confirm the Venezuelan situation in general, where, at the high school level at least, equal opportunity is given to both sexes.

A2: Age

It is commonly supposed that older students drop out of school earlier than younger pupils. This was affirmed by Cook (1956) and Greene (1966). The present study reveals that there is reason to maintain this assertion. The low coefficient of correlation ($r = -.15$) is negatively significant ($p < .05$), that is to say there is a tendency for older students to drop out of school earlier. The reason given by some authors that older students have difficulty relating to younger classmates (Greene, 1966, and Cervantes, 1966) cannot be accepted here because age was taken into account when grouping the students into different classes. In Venezuela, two aspects seem important: (a) In general, older children are requested by their parents for physical and financial help. (b) Many older students are repeating courses. This reveals a poorer background and so their difficulty in persevering tends to be greater than those proceeding normally.

A3: Size of the Family

The finding in this area ratifies the result of an experiment made by Dillon (1949), and it is clear that the size of the family doesn't seem to be an influential factor causing dropouts. Nevertheless, 21% of students sampled come from families of 12 people or more and only 5% of students who gave "5" as a perseverance prediction score come from this kind of family. In spite of this the result obtained through the analysis ($r = -.11$) is not significant and doesn't permit considering this factor as a clear possible cause of dropping out.

A4: Parents' Occupation

It is not possible through the analysis of the results of this variable to infer any valuable conclusion. However, because parents' occupations in Venezuela are strongly linked to socio-economical levels, the remarks given in the preliminary section of this chapter can be maintained as useful (see page 91).

A5: Parents' Educational Level

The results of the study suggest that no relationship can be established between A5 and dropout ($r = .04$, $s_r = .07$). A null hypothesis formulated between father's educational level and perseverance was supported ($\chi^2 = 6.15$, with $df = 12$). These results are inconsistent with those of Cervantes (1966) and Greene (1966) who attached special importance to this aspect. It is to be noted that in Venezuela the constitution of the family contributes to a broader influential circle at home than that of the father and mother by themselves, whose sway may hence be lessened.

B1: Mathematic Skills

The dispersion of the results obtained shows that there is no defined orientation of paired scores, and so the correlation coefficient between this variable and the degree of perseverance ($r = .06$) is very low and statistically not significant. This result confirms a finding made by Bayer (1976) who concluded that in a broad sense "academic ability" is not practical for predicting student's dropout. The scores show a very poor level for most of the students in this area and, because of this, there is no clear reason for them to feel better or worse and use this as a motive for leaving school.

B2: Reading Skills

As was stated before, this variable included two subvariables: (a) Speed of Reading, and (b) Comprehension of Reading. They were analysed separately and then together. The coefficient of correlation for each one ($r_a = .00$ and $r_b = -.01$) and the combined coefficient ($r = -.03$) are not significant. This result differs openly from the result obtained by Greene (1966). The student sample demonstrated good reading skills but the comprehension was very poor. The great difference existing between the two factors doesn't permit drawing a valuable conclusion, since each part has low and similar correlation with the dependent variable.

B3: Habits of Study

The results of this test show a good spread of distribution. It seems that the lack of study skills doesn't constitute a real problem for these students. From this research, it is not possible to draw a clear relationship between this variable and school perseverance ($r = .11$).

This result seems in contradiction with the result obtained by Katz and Wright (1977), however, their study was carried out under special conditions of training. For other authors (Voss, 1966, and Summerskill, 1962), study skills are considered as a part of a whole called "student capacity", "achievement" or "background".

B4: School Adjustment

This study puts into clear evidence that a pupil with a good school adjustment has more of a chance to persevere than another without this disposition. The coefficient of correlation found between B4- School Adjustment and C2- Perseverance ($r = .45$) is rather high, taking in mind that it is calculated between two quite different variables and the data were obtained using different kinds of instruments (Garrett, 1966). The coefficient of correlation is clearly significant ($p < .01$). It is to be noted that the correlation between S6- Prediction from School Adjustment and B4- Questionnaire - School Adjustment ($r = .59$) is also quite high in the circumstances where the instruments for these variables were applied. This latter coefficient reinforces the preceding one. The result agrees with many other findings (Lichter, 1962; Schreiber, 1967; Thomas, 1954; Johnson, 1948; Greene, 1966; Cervantes, 1966; Summerskill, 1962; Astin, 1967; U. C. S. of Greater Vancouver Area, 1970).

School adjustment seems to play an important role in the problem of perseverance. In other words, school adjustment strongly influences the decision to either stay in school or to leave it.

B5: Student's Motivation

The results obtained for this variable are very similar to those of

the preceding variable. Reasons for this may include:

(a) Many aspects considered in the test of Motivation are very similar to those contained in the test of School Adjustment; in part both are measuring aspects related to the degree of students' satisfaction.

(b) The natural tendency of a Venezuelan student to overestimate himself. A coefficient of correlation of .45 which is clearly significant ($p = < .01$) means that there is an interesting relation between student's motivation and student's perseverance.

The coefficient of correlation found between "C1- Sum of all ten subvariables and B5- Student's Motivation" ($r = .66$) reinforces the preceding results (see page 87). Similar results were obtained by Summerskill (1962) and Iffert (1957).

B6: Family Adjustment

The very low and non-significant correlation found for this variable ($r = .03$) suggests that greater or lesser family adjustment is not a cause of dropout problem. It can be easily presumed that for some students a good family adjustment is a positive force in the pursuit of their studies, and for others with bad family adjustment, school is a desirable harbor of peace and friendship. This may be true in Venezuela. However, several other findings (Kettering Foundation, 1979; Wrenn, 1967; Cervantes, 1966; The Canadian Research Committee on Practical Education, 1950; and Cope, 1975) are in contradiction with the results of the present study.

B7: Future Career Desired

The considerations given for this variable in Chapter V can be taken as discussions points. The low number of students that answered this

question and the impossibility of establishing any valuable correlation are factors that prevented reaching a conclusion, at least numerically.

B8: Speaking about a Career

A low but significant correlation was found between C2- Perseverance and B8- Speaking about a Career ($r = .14$ with $p < .05$). This implies that, to a certain extent, the more frequently children speak with their parents about their future career, the better their perseverance. It is interesting to further compare those students who gave 5 as a prediction value with those who gave 1. In the first group (N = 19) 8 spoke frequently with their parents about their future career and 1 never. In the second group (N = 18) 3 spoke frequently and 5 never. For these two extreme groups the difference is very noticeable, but not for the majority of the 200 subjects. It is curious also that it is in the homes where the father has no defined occupation where the subject of future careers is mentioned more frequently (45% against 28% for all other groups). In spite of these considerations, it is difficult to formulate a global assertion with a sufficient degree of confidence concerning the specific relevance of this variable.

Conclusions

In light of the statistical analysis and discussion of the results obtained through the present study, it is possible to conclude that:

1. The study establishes empirically the existence of the potential problem of dropouts in the Venezuelan secondary school and serves to validate the general statistics provided by the Ministry of Education.

2. Factors related to:

-the socio-economical status of the family

-a student's school adjustment

-a student's motivation toward the school and his studies

appear as the most salient factors influencing student dropouts.

3. The student's age and the degree of orientation toward the student's future career given by the parents, appear as additional possible stimuli in the dropout problem.

4. Those factors related to sex, size of the family, parents' educational level and the academic skills studied in this research cannot be considered as possible causes of student dropouts.

The profile of the potential dropout from the Venezuelan high school is a student with low school adjustment and low motivation toward studying. He is also likely to be an older student in relation to his peer group in the same grade and to come from a family with a low socio-economical status, who rarely discuss future career orientations.

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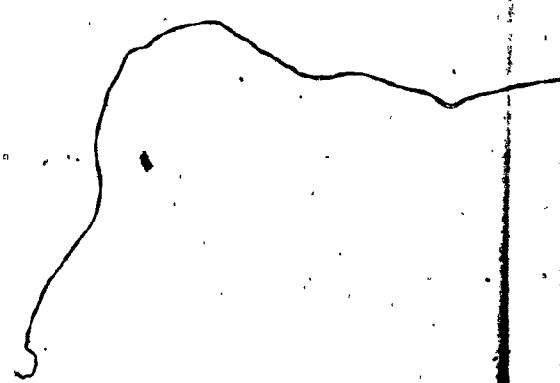
APPENDIX



QUESTIONNAIRE

for Individual and Family Information

Instructions

- The information we are requiring from you in this questionnaire will be used for general purposes. The information you give will be held confidential and no personal references will be made.
- Before answering, read carefully the instructions that precede each question.
- Take time to answer all questions carefully. In case of doubt, ask the teacher for assistance.

Write clearly.

Last Name _____

Name _____

Age _____ Grade _____ Section _____

School _____

Date _____

1. SEX: Write an X in the corresponding square:

☐ female

☐ male

2. AGE: What is your age?

_____ years

3. SIZE OF THE FAMILY

Indicate how many persons live with you at home (including yourself):

_____ persons

How many brothers and sisters do you have?

_____ brothers

_____ sisters

4. PARENTS' PROFESSION

What is your mother's occupation?

_____

What is your father's occupation?

_____

5. PARENTS' EDUCATIONAL LEVEL

Indicate the level of studies that your mother has attained by writing an X in the corresponding square:

☐ None
☐ Elementary School
☐ Secondary School
☐ Normal School
☐ Pedagogical Institute
☐ University
☐ Other

Indicate the level of studies that your father has attained by writing an X in the corresponding square:

- ☐ None
- ☐ Elementary School
- ☐ Secondary School
- ☐ Normal School
- ☐ Pedagogical Institute
- ☐ University
- ☐ Other

6. PARENTS' ORIENTATION FOR A CAREER

In this question please indicate if your parents discuss possible future careers with you and how often?

Write an X in the corresponding square:

- ☐ I speak frequently with my parents about my future career.
- ☐ I speak now and then with my parents about my future career.
- ☐ My parents rarely speak to me about my future career.
- ☐ My parents never speak to me about my future career.

7. FUTURE CAREER

And now, tell me:

What do you wish to do when you leave high school?

_____

QUESTIONNAIRE FOR PREDICTION

Instructions:

- Do not write your name on this sheet.
- The information given by this questionnaire will neither be known by the principal nor the personnel of the school.
- Be sincere in answering the questions. Before answering, read each question carefully.

1. You know that many professions which are practiced in Venezuela do not require a complete course of studies in the secondary school. Think of what you intend to be in the future. How many years of study will be required?
Write an X in the corresponding square.

1	2	3	4	5

2. You know your elementary school background. You also know the difficulty you have in following the courses in the secondary school for lacking the basic knowledge. Considering this point, how many years will you be able to study in the secondary school?
Write an X in the corresponding square.

1	2	3	4	5

3. Think about your parents' occupation and the help that they will need from you. Maybe you will be compelled to interrupt your studies in order to help them. If this occurs, how many years do you expect to study in the secondary school?
Write an X in the corresponding square.

1	2	3	4	5

4. Today all things are expensive. Books and school materials are costly. Will your parents have enough money to meet the expenses? This reasoning will allow you to forecast how many years you will study in the secondary school.
Write an X in the corresponding square.

1	2	3	4	5

5. Examine if you like to study or not. According to this criterion it will be easy for you to forecast how many years you will remain in the secondary school.
Write an X in the corresponding square.

1	2	3	4	5

6. Reflect on how you feel in the school with the teachers and the classmates, good or bad. According to this criterion you will be able to see if you will continue your studies or not and how many years.
Write an X in the corresponding square.

1	2	3	4	5

WHAT DO YOUR PARENTS THINK

1. What do your parents think of your studies? Are they satisfied or not? How many years will your parents allow you to pursue your studies?
Write an X in the corresponding square.

1	2	3	4	5

2. Think about your parents' profession. Perhaps they want you to be what they are now. Perhaps they want you to be better than them. According to this criterion how many years will they allow you to study in the secondary school?
Write an X in the corresponding square.

1	2	3	4	5

3. Your parents know the facility or difficulty you have in studying; that gives them an idea about if you will continue to study or not and for how many years. How many years will they allow you to study?
Write an X in the corresponding square.

1	2	3	4	5

4. Maybe you wish to study a lot or maybe not. The point is if your parents will be able to pay for your studies. What do your parents think about it? How many years will your parents allow you to study?
Write an X in the corresponding square.

1	2	3	4	5

C U E S T I O N A R I O

Información individual y familiar

INSTRUCCIONES

- La información que se le solicita en este cuestionario será utilizada globalmente y sus datos personales serán considerados como información privada, no permitiéndose su publicación.
- La colaboración que usted preste mediante el suministro de estos datos con la mayor exactitud posible, contribuirá a una mejor marcha de su Liceo, lo cual redundará en su bien personal.
- Lea atentamente las instrucciones que preceden a cada una de las preguntas para dar la correcta respuesta. Usted dispondrá del tiempo necesario para completar el cuestionario.
- No deje de contestar ninguna de las preguntas. Si tiene alguna duda, consulte con el Profesor que le asiste en estos momentos.

Escriba con letra bien clara :

APELLIDOS: _____

NOMBRE(s) _____

CURSO_____ SECCION_____ EDAD _____

INSTITUTO_____ FECHA_____

1. SEXO : Marque con una (X) el cuadrito correspondiente :

☐ varón

☐ hembra

2. EDAD : Cuántos años tiene ?

Tengo_____ años.

3. CARGA FAMILIAR : Indique cuántas personas viven con usted en la casa (inclúyase usted mismo) .

En mi casa vivimos un total de _____ personas.

Cuántos hermanos tiene usted ?(inclúyase usted mismo) .

Nosotros somos:

_____ varones

y _____ hembras

4. PROFESION DE LOS PADRES :

En qué trabaja su mamá ?

_____

En qué trabaja su papá ?

_____

5. NIVEL EDUCATIVO DE LOS PADRES :

Indique el tipo de estudios que tiene cursados su mamá marcando con una (X) el correspondiente cuadrito :

☐ Ninguno

☐ Escuela Primaria

☐ Secundaria

☐ Normal (Maestra)

☐ Instituto Pedagógico

☐ Universidad

☐ Otro

Indique el tipo de estudios que tiene cursados su papá marcando con una (X) el correspondiente cuadrito :

- [ ] Ninguno
- [ ] Escuela Primaria
- [ ] Secundaria
- [x] Normal (Maestro)
- [ ] Instituto Pedagógico
- [ ] Universidad
- [ ] Otro

6. ORIENTACION DE LOS PADRES PARA UNA CARRERA :

Contestando a esta pregunta usted indicará si sus padres (uno ú otro) le dan a usted algún tipo de orientación acerca de su futura carrera ú oficio.

Marque una (X) en el correspondiente cuadrito después de leer con toda atención la frase :

- [ ] Hablo con frecuencia con alguno de mis padres acerca de mi futura carrera.
- [ ] Hablo de vez en cuando con alguno de mis padres acerca de mi futura carrera.
- [ ] Hablo muy raramente con mis padres acerca de mi futura carrera.
- [ ] Yo nunca hablo con mis padres acerca de mi futura carrera.

QUE ES LO QUE PIENSA USTED SER EN SU FUTURO ?

_____

.....000000000.....

CUESTIONARIO DE PREDICCION

Instrucciones

La información que se le va a pedir ahora no va a ser conocida por el Director de su liceo ni tampoco por el resto del personal del mismo .

No escriba su nombre en esta hoja. Trate de contestar con toda sinceridad a las preguntas que se le hacen.

Antes de contestar reflexione detenidamente sobre cada punto.

SU CRITERIO PERSONAL

1. Usted sabe que muchas de las profesiones u oficios que hoy pueden ejercerse en Venezuela no requieren el haber terminado todos los cursos de Bachillerato. Pensando en lo que usted va a ser mas tarde, cuántos años de Secundaria cree usted que va a necesitar terminar?

Marque con (X) el correspondiente cuadrito.

1	2	3	4	5

2. Usted conoce la base de conocimientos que usted trae de su Primaria.Usted sabe tambien la dificultad que encuentra para seguir sus estudios de Secundaria por la falta de conocimientos básicos, lo cual le dificulta sacar adelante sus materias. Considerando este problema: Cuantos años de Bachillerato cree usted que podrá terminar ?

Marque con (X) el correspondiente cuadrito.

1	2	3	4	5

3. Piense un momento en la ocupación de sus padres y en la necesidad que ellos tienen de su ayuda presente. Es posible que usted tenga que interrumpir sus estudios para poder trabajar y ayudarles. Si esto es posible que ocurra, cuántos años de Bachillerato cree usted que le será posible terminar?

Marque con (X) el correspondiente cuadrito.

1	2	3	4	5

4. Hoy en dia todo es caro. Los libros y el material escolar en general son muy caros. Tendrán sus padres dinero suficiente para pagar sus estudios ? Esto le puede permitir a usted predecir , más ó menos , hasta qué año de Secundaria podrá estudiar.

Marque con (X) el correspondiente cuadrito.

1	2	3	4	5

5. Es necesario que piense si verdaderamente le gusta estudiar o no. De acuerdo a este criterio personal es fácil para usted calcular cuántos años va a estudiar en Secundaria.

Marque con (X) el correspondiente cuadrito.

1	2	3	4	5

6. Piense un poco en cómo siente en el Liceo, con sus Profesores y compañeros. Esto determina el hecho de sentirse a gusto ó a disgusto. De acuerdo a esto puede preveer si va a continuar estudiando o no y por

cuánto tiempo. Indique el número de años que piensa estudiar en Secundaria marcando con (X) el correspondiente cuadrito.

1	2	3	4	5

QUE PIENSAN SUS PADRES

1. Piense en los comentarios que su papá ó su mamá han hecho sobre sus estudios a favor o en contra de los mismos. Esto le permitirá darse sobrada idea acerca de lo que ellos piensan. Cuántos años cree usted que ellos le permitirán estudiar en Secundaria ?

Marque una (X) en el correspondiente cuadrito.

1	2	3	4	5

2. Piense en la Profesión de sus padres y en el deseo que ellos tienen de que sea lo que ellos son, de que les ayude o de que llegue a superarse en la vida. De acuerdo a este criterio, cuántos años cree usted que podrá terminar en Secundaria ?

Marque una (X) en el correspondiente cuadrito.

1	2	3	4	5

3. Sus padres conocen la facilidad o dificultad que usted tiene para estudiar y por lo mismo ellos determinarán si usted ha de continuar estudiando ó no y por cuántos años. Cuántos años ?

Marque con (X) el correspondiente cuadrito.