

Econometric analysis of school success: case of the Moroccan community in France

Rabia Hajila

National Institute of Archeology and Heritage Sciences, Rabat, Morocco

Email: hajila_rab@yahoo.fr

Abstract— Among the debates that cross French society today, those affecting school, immigration and the integration of immigrants, rarely serene, they stay carriers of many received ideas. Economic, social and cultural integration, the sharing of common values and the transmission of knowledge are at the heart of the challenges of both school and immigration. Being more than a million foreign children to attend, it is today on the school that we count to strengthen the integration of young immigrants.

Keywords— Immigration, Logit model, Moroccan community, School success.

I. INTRODUCTION

France receives many immigrant workers who come to seek work on their soil that they have not been able to find in their native country, and which also make an important contribution to its economy. France, loyal to its tradition of hospitality and a policy of cooperation whose relations with the emigration nations are one of the important modalities, to develop a policy of welcoming migrant workers. This policy must help these foreigners and their families to better solve their life problems in France and to fit in as best as possible in the French community, for the good of all. The education of these migrant workers and their children is one of the main points of application of this reception policy, which the positive balance sheet can already be established, without failing to chart future directions, marking the next steps to be taken.

II. PROBLEMATIC OF THE STUDY

1. Objectives of the study

The aim of the study is to detect the determinants of school success and to verify the accuracy of several hypothesis concerning the school success of young Moroccan immigrants in France who are still pursuing their studies and in parallel those who abandoned, and thence know their relationship with their families, their friends, their comrades, their teachers and in a global context all the entourage of their place of social and school life in the French society.

Hence the interest of making a survey of these children in order to verify if the family environment, the school environment, the student's surrounding, his profile as well as his behavior have an influence on the school success of the Moroccan immigrant child in France.

From this problematic, follows a questionnaire for which we asked ourselves several questions: What are the factors that determine the school success of the children of Moroccan immigrants in France? What are the explanatory variables of the school success of young Moroccan immigrants within the French society?

2. Questionnaire development

After consulting a certain number of statistical documents (questionnaires, grids, interviews, group discussions, etc.), we have several themes related to our research. This allows us to phrase the contents of the questionnaire project and to collect a set of qualitative and quantitative sufficiently relevant variables. The latter was tested on some children of Moroccan immigrants who came to spend their holidays in Morocco. This pilot survey was used to restructure and focus in the choice of the final variables of the questionnaire.

This one is composed of several types of variables such as:

- Individual variables;
- Environment variables;
- Behavior variables;
- School variables;
- Performance variables.

This decomposition as a whole is not fixed, it does not reflect all the complexity of reality and is not unique. Moreover any other logical decomposition could be considered. The goal is to simplify the presentation to better understand the reality.

3. Choice of surveys

This survey concerned the children of Moroccan immigrants whose age varies from 13 to 22 years. It was conducted with:

- Families with children in school or who have dropped out;
- Students continuing their studies;
- Students who have left school.

It should be noted that some families did not respond favorably to our expectations, as some institutions did not even want to read the content of the questionnaire.

4. Location of the survey

The department of Yvelines (Poissy, Les Mureaux, Chanteloup, Mantes-la-Jolie, Saint-Germain-en-Laye) as well as Trocadero and the suburbs of Paris have been selected for reasons of convenience and means.

Indeed, the Moroccan school population is more represented in these regions of high immigration, because of the existence of a very large number of companies that employ abundant foreign labor in addition to the headquarters of our embassy in France .

We wish to point out the support of the members of our family residing in Yvelines that has been of great help to us since no subsidy was granted to us for transport or stay during our multiple trips to France.

5. Survey field

We have been faced with some problems with some middle and high schools for direct contact with students in class and for a consultation of their school booklets. This reluctance is due to bad circumstances:

- Beginning of schooling.
- Period of bombings.

These obstacles did not prevent us from continuing and persevering to determine the field of our investigation. We visited the following places:

- High schools;
- Middle schools;
- Youth associations;
- Sociocultural center;
- Households of Moroccan immigrant families (home visits).

On this occasion, let us point out the reluctance of some managers of administrative establishments showing a clear racism, which did not allow us to access the classes of different middle and high schools for direct contact with students and a consultation of school booklets. This resulted in the narrowing of the field of our survey. With regard to the selected high schools:

- Saint Exupéry High school in Mantes la Jolie;
- Jean Rostand High school in Mantes la Jolie;
- Vaucanson Professionnal High school in Les Mureaux.

We would like to point out the support of our Embassy in Paris and our consulate in Pontoise, who helped us a lot

to carry out this study, following their various interventions.

6. Sample size

600 copies of the questionnaire were distributed. Our desire was to get the largest number to have a comprehensive and representative sample and to be able to collate the results of the survey.

Unfortunately, only 56% were rejected and only 52% were reinstated as well as the size of our sample without increasing the wealth of their information.

We give below the number of questionnaires delivered and returned in each city.

City	Number of questionnaires	
	Distributed	Returned
Poissy	148	114
Les Mureaux	60	10
Mantes la Jolie	200	105
Achères	46	37
Chanteloup	10	9
S.G. en Laye	10	3
Trocadéro	70	44
Limay	20	0
Others	36	13
Total	600	335

7. Receipt of questionnaires

Of the 600 copies distributed, only 335 questionnaires were retrieved. As noted earlier, some students and school leaders have had uncivilized behavior sometimes even throwing us the questionnaire.

We are very pleased to report the positive support of our embassy in Paris and our consulate in Pontoise for their intervention with the Prefect of Yvelines in Versailles for an extension of the residence visa and the incentive to answer the questionnaires.

During the collection and taking advantage of the grouping of children at the exit of schools, or in front of the doors of their homes and in the socio-cultural centers, some questionnaires were completed thus allowing to enrich the research.

8. Data gathering

With regard to data collection, the survey took place during the period from 24/08/1995 to 11/11/1995. On the whole, all the objectives set were achieved despite the many difficulties encountered.

9. Data processing

The data processing took place in two steps:

9.1 Computer processing

It has been realized in several phases:

- Coding of variables;
- Consistency test between variables;

- Making entry masks;
- Data entry;
- Clearance of files (consistency tests and code validity program);
- Tabulation program.

Data managing was performed on the statistical processing software **EXCEL**, **SPSS**, **STATA** and **LIMDEP**.

9.2 Results and statistical tests

The results of the exploitation allowed us to reach the following series:

- The marginalized;
- Two-dimensional cross-tabulations;
- The ratios;
- Statistical tests: Fisher, Student et Khi²;
- Correlation tests;
- Logit models.

All these results have been analyzed and interpreted. In terms of content analysis for qualitative questions, we elaborate summary sheets to identify key ideas for each theme.

III. INDENTATIONS PRESENTATION OF THE RETAINED ANALYSIS

In this section, we present the rankings of variables and data processing methods implemented in the following sections.

1. The ranking of variables

The data extracted from the questionnaires have been grouped into five homogeneous sets which are as follows:

- The individual variables,
- The family variables,
- The environment variables,
- The behavior variables,
- The school variables.

This decomposition as a whole is not fixed, it does not reflect all the complexity of reality and is not unique. Moreover any other logical decomposition could be considered. The goal is to simplify the presentation to better understand the reality.

2. The methods used in statistical processing

The approach consists of using the data collected on young immigrants to identify the most significant econometric models (from the statistical, economic, social and other points of view). The search for the most relevant models requires the elimination of colinear variables. Thus, among two collinear variables, the one that is the least correlated with the variable to explain, namely the school success of the children of Moroccan immigrants in France, is discarded.

On the other hand, analyzes are occasionally completed and explained by the crossing of the rival variables within

double-entry tables.

Finally, note that the interpretation of the results found is done by reference to:

- To the results of the various statistical treatments performed on the data of our sample,
- The theoretical contributions cited in the bibliography that preceded the development of this work,
- The results of empirical work carried out by some researchers and organizations specialized in the field.

IV. THE DETERMINANTS OF THE SCHOOL SUCCESS OF CHILDREN OF MOROCCAN IMMIGRANTS IN FRANCE

This section focuses on the determinants underlying the school success of children of Moroccan immigrants in France. Among the factors selected and analyzed, we can identify personal characteristics of the student, his family environment, his environment, his behavior, a set of school variables, as well as previous school performance (CM₂, 6th, second year, the baccalaureate). These will allow us to define the variable to explain: school success.

1. General presentation of the different cohorts taken in the analysis and definition of the model

In many cases the specification of a linear model is incorrect. One of these cases is where the predicted variable is dichotomous, or polytomic.

The use of the linear probabilistic model is possible, but it implies an estimation which leads to predicted values outside the interval [0,1] that are non acceptable values. Therefore, the limits imposed on the binary variable - for example, 0 and 1 - are ignored if the standard least-squares multiple regression model is used.

Although there are several possibilities to overcome this difficulty in the linear probabilistic model, it seems preferable to look for models for which the predictions conform to the appropriate interval. Thus, the problem can be reformulated so that predictions are no longer a binary variable, but rather a continuous variable that naturally remains in the range [0,1]. In this respect, the model used is the Logit model. This will measure the effect of each explanatory variable on the variable to explain, that is to say the influence of the variable after elimination of structural effects.

This is a dichotomous univariate Logit model. The observed variable for each student is school success ($y_i = 1$ if the student's average is greater than or equal to 10 and $y_i = 0$ otherwise).

The probability of school success was chosen logistically:

$$P(y_i = 1) = \frac{1}{1 + e^{-x_i \beta}}$$

Among the plethora of explanatory variables available,

we can group in five categories the variables that we selected in our effort to determine the school success of children of Moroccan immigrants in France.

The first includes personal characteristics: sex, age of student, school starting age, age of arrival in France.

The second group includes family variables: the rank of the student, the age of the father, the age of the mother, the number of brothers, the number of sisters.

We also have a rich set of variables that describe the student's environment: the type of housing, the type of life of the student, the language spoken within the family, the educational level of the parents, the educational level of the brothers and sisters, the socio-professional category, the requirement of the parents, the family problems, etc.

The fourth category of variables is used to describe student behavior: cigarette, alcohol, and drug use, non-study activity, part-time work, lunch location, relationship with boys, relationship with girls, location where the student is comfortable, watching television, interesting shows, etc.

Finally, we have the school variables: type of institution attended, private lessons, grade repetition, thinking about dropping out of school, satisfaction of the guidance, help with school work, more difficult time during the examination period, activity the day before the exam, problems with the teachers, absence of the student, etc.

2. Econometric models and equations

It is therefore a question of explaining the school success (RS) in the baccalaureate, in the second, in the 6th and in the CM₂. Due to the dichotomous nature of the dependent variables, the equation to be estimated becomes for the student i :

$$RS = \alpha_0 + \alpha_1 X_{1i} + \alpha_2 X_{2i} + \alpha_3 X_{3i} + \alpha_4 X_{4i} + \alpha_5 X_{5i} + \mu_i$$

Wherein

$$RS \begin{cases} = 1 & \text{if the average is } \geq 10 \\ = 0 & \text{if the average is } < 10 \end{cases}$$

Thus, we can write the equations of the Logit model for the four cohorts as follows:

$$RS_{bac} = \alpha_0 + \alpha_1 X_{1i} + \alpha_2 X_{2i} + \alpha_3 X_{3i} + \alpha_4 X_{4i} + \alpha_5 X_{5i} + \mu_i$$

$$RS_{sec} = b_0 + b_1 X_{1i} + b_2 X_{2i} + b_3 X_{3i} + b_4 X_{4i} + b_5 X_{5i} + \mu_i$$

$$RS_{6^{eme}} = c_0 + c_1 X_{1i} + c_2 X_{2i} + c_3 X_{3i} + c_4 X_{4i} + c_5 X_{5i} + \mu_i$$

$$RS_{CM_2} = d_0 + d_1 X_{1i} + d_2 X_{2i} + d_3 X_{3i} + d_4 X_{4i} + d_5 X_{5i} + \mu_i$$

and

X_{1i} is the set of personal variables,

X_{2i} is the set of family variables,

X_{3i} is the set of environment variables,

X_{4i} is the set of behavior variables,

X_{5i} is the set of school variables.

μ_i is the element of the random error vector whose probability distribution follows a logistic form.

The results are overall satisfactory. The coefficients of the variables are in the majority of cases significant at the usual levels of confidence and their sign does not contravene reality.

The numerical values of the coefficients have no direct interpretation; however, their sign and the fact that they are significant or not are interpretable. The sign makes it possible to know if the probability of success is an increasing or decreasing function of the corresponding explanatory variable.

The non-significance of certain coefficients makes it possible to identify variables that have little explanation for school success or failure.

V. ANALYSIS AND RESULTS OF ECONOMETRIC MODELS

1. Impact of individual variables

Several authors, including those belonging to the School of Differential Psychology, claim that certain individual characteristics such as gender, age, rank and many others are determinants of the student's personality and school performance.

The individual variables studied for influence on academic success, through statistical and econometric treatments, are as follows:

- The sex,
- The age,
- School starting age,
- Arrival age to France.

The majority of researchers say that sex does not influence (or little) school performance (LIVINGSTON 1968, THOMAS 1954). A minority believed on the basis of differential psychology, male superiority in digital proofs and mechanical skill and female superiority in performing tasks, involving memory and verbal data handling (VERON 1952).

MONTMARQUETTE (1989), based on an empirical study, infirm, albeit partially, the hypotheses of differential psychology relating to differences in performance according to sex, in one area or another.

In this study, the parameters of the equation of determinants of school success for each cohort show that it is explained by several variables. Indeed, sex has a negative influence on school success, but it is only significant in the 6th grade with female predominance (on average 53%).

School success is a growing function of age, all things being equal, an increase in the age of one year increases the probability of success. Age is apparent throughout the school curriculum except in the 6th where it is not significant

and has a negative effect on school success in CM₂, because for this cohort, the older the student, the worse his results are and the motivation for the studies.

At this level, we can say that the results of this analysis are in the same direction of those of several researches (DANDEKAR (1955), MONTMARQUETTE (1989)). GHARIB (1991), based on a survey found that students with school delay were older than their comrades who had the best school performance.

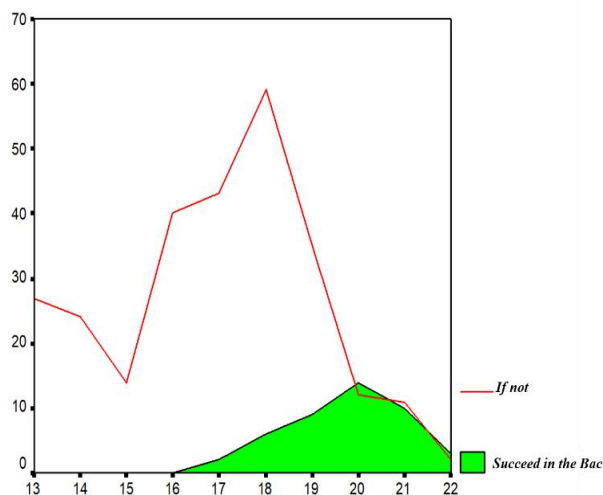


Fig. 1: Graph representing the discriminatory threshold of students in the baccalaureate

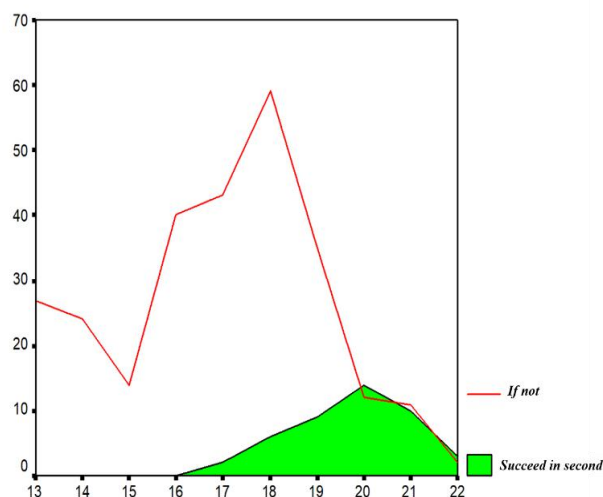


Fig. 2: Graph representing the discriminatory threshold of students in 6th

The negative sign and the value of the age squared variable imply that the probability of succeeding in the baccalaureate is up to 20 years, to pass in second rises to 18 years. In contrast, in 6th it is not significant despite the negative sign of the coefficient. The graphical

representations show us the threshold of discrimination among students in the baccalaureate and second.

School success is a decreasing function of arrival age in France. In other words, the more the student arrives in France at a late age, the more these school performances deteriorate. This result is apparent at all levels from CM₂ to the baccalaureate, but not significant.

We can raise almost the same results for the age of entry to school. This explanatory variable has a negative but irrelevant impact on school success, except in the 6th where the effect is positive. However, the early entry to school means a highly likely entry to a private school, since public schools in France only accept children aged 6 years.

The influence of the variable "age of entry to school" is very controversial in the field of psychopedagogy. Thus, some authors deduce from their studies that adolescents with poor school performance, sometimes leading to school drop-out, have mainly delayed their entry into school (BOWMAN, MATTHEWS, 1960). Others state that age of entry has no effect on school performance (LIVINGSTON, 1968).

2. Impact of family variables

The family environment appears as a powerful determinant of school success. The age of the father and the age of the mother are sometimes positive fonction, sometimes negative, depending on the level of the student. Indeed, the age of the parents has a positive impact at the level of the second and, positive and significant at the level of the 6th. At the level of CM₂, only the age variable of the mother is significant but negatively, on the other hand at the baccalaureate the age of the parents is decreasing function of the school success but it is significant only for the father (age of the father higher than 54 years old).

This effect can be explained by the fact that whenever the father and / or the mother are old enough, the probability that they will not be educated is great. Indeed, the average age of mothers with no education is higher than that of mothers with higher education levels: 44 for the first and 40 for the second. On the other hand, even when parents are educated, their school curriculum differs from that of their children because of the different changes that have affected the school system.

As at the macroeconomic level, at the family level the financial resources are not unlimited. In general, each time the number of siblings increases, the share of space, financial resources and time allocated by parents to children is reduced. Several researches have revealed that when the number of the brothers and sisters becomes high, the possibility of the school failures is greater (DILLON 1969, MILLER 1963, LIDDLE 1962).

Our results show that the number of siblings only significantly affects school success at the level of CM₂. In contrast, in the baccalaureate this variable acts negatively and weakly on school performance. While in second only the number of sisters has a negative influence without being significant on the school success. At the 6th level, siblings are a growing function of school success.

We can add that when we move from a mother without a level of education to a mother of a university level, the average number of children goes from 4,8 to 3,2. The same results were found for the analysis of the relationship between the number of children and the father's level of education.

Psychologists say that sometimes peer education is more effective than that of parents. The cause comes from the approximation of age and cognitive, emotional and psychomotor development.

The translation at the level of the family help makes it possible to affirm that it is more relevant by the brothers and sisters than by the parents. The exchange of knowledge of the student with that of his brothers and sisters, of a higher level of education increases the probability of school success.

3. Impact of environmental variables

Academic success is also a function of a set of environment variables. The type of life is significantly positive only in 6th and 5th grade. Indeed, a sixth grade student can succeed even if he only lives with his family members, however a pupil in CM₂ must be with his parents to succeed. The type of life has a weakly negative influence on school success in the baccalaureate which can be explained by living alone, the student is away from the authority of parents and their support.

The language spoken within the family is only significant in the second grade and in the CM₂ with a negative sign at the CM₂ and 6th levels. So the language spoken within the family other than the French language has a negative effect on school success, except for the baccalaureate. The language spoken within the family remains for the majority of Moroccan immigrants the language of origin with its different dialects. Indeed, there is no student from a disadvantaged family speaking French as a family.

The existence of a school language different from the language spoken as a family may be one of the causes of grade repetition and school drop-out (DEBLE, 1980).

Research carried out in Thailand, Iran, and Canada has shown that school failure, leading to grade repetition or dropping out, are more likely among children whose parents spoke a language different from that used in teaching (UNESCO, 1967, MONTMARQUETTE, 1989).

Linguistic poverty, which is identified as a factor in school failure, is linked to the disadvantaged social category (AHRACHOU, 1991).

The parents' requirement is negatively linked with the dependent variable, at the baccalaureate, the second and the sixth level without being significant.

The emotional climate of the family environment can undermine performance and special education. In principle, a united family gives the child more security and influences positively school success. The separation of the parents, which can be due to several causes (death, divorce, separation ...), acts in the negative sense, not only on the school performance, but also weakens the "me" and makes appear the feeling of insecurity.

Based on the above, it's more logical to believe that living in a single-parent family is at a disadvantage in terms of school performance. MONTMARQUETTE confirms this observation through three ideas:

- Lone parent has less time to care for children since he/ she is solely responsible for all family responsibilities;
- Some children experience psychological problems as a result of their parents separation;
- The resources are lower because the income of lone-parent families is on the whole rather low.

These negative effects of the disunited family are also valid for the Moroccan education system. The confirmation comes from the results of GHARIB (1991).

Our econometric results show that the family stability illustrated by the variable parents together has an impact, negative in second and negatively significant in sixth, on the school success. A stable and united family can therefore have a positive influence on school performance.

Note that the roles of the father and mother are complementary in the education and emotional support of children. It is not only the physical separation that reduces the chances of school success, but also the emotional separation and the conflicts that result from it.

Based on the statistical results, we note that absences increase each time the parents are separated. Separation can indeed have several causes:

- Death: 35,7%.
- Divorce: 32,1%.
- Abandonment: 25%.
- Other reasons: 7,2%.

Absences in annual averages are, for each aforementioned cause:

- Family separated by death: 4,8 days.
- Family separated by divorce: 4,6 days.
- Family separated by the abandonment: 3,1 days.
- Family separated by other reasons: 19,5 days.

Note that the average absence is 9 days.

Different family problems can also have a negative impact on school success. It manifests itself at the level of the bachelor's degree with a critical probability that tends to zero.

The change of place of residence is significant starting with the CM₂, but with different effects. School results of the pupils in the 5th grade are positively influenced, but the effect becomes negative for the students in the 6th, the second and the baccalaureate.

According to BENNACER (1991), the student's school grades are generally in line with the expectations of his parents and his aspirations for the pursuit of higher education. The school mark varies according to the student's degree of commitment, which can be high or low depending on the socio-economic level. The first level benefits more favored and middle-class families, non-repeaters and those with high aspirations for future studies.

For the adolescent who is very sensitive to the expectations of others, the level of his aspirations reinforced by the perceptions of his parents, introduces into the structure of his personality the need to avoid inferiority. The latter is often transformed into a need to succeed.

According to the results found, the fact that parents think about the success of their children has a meaning and a positive impact on school success throughout their course. In other words, the more parents think that their children will succeed the more successful they are.

Several researchers stress the importance of the impact of the socioprofessional category (C.S.P) on school success (UNESCO (1967), BIENSTOCK (1968), SYNDERS (1976), KAZYNSKA (1934)). The C.S.P is an excellent measure of the socio-economic level. The poverty of family resources requires the help of children. The consequence is a reduction of the time that the student devotes to his studies. In the same way the conditions of revision of the lessons and resolution of the exercises can be at the origin of the school failures. Indeed, the disposition of an isolated room and the possibility of accessing a library facilitates the acquisition of human capital (TIOURIRINE (1990), MONTMARQUETTE (1989)). CHEDATI (1990) establishes a statistical table from which it can be deduced that the school success rate decreases when one moves from one CPS to another: it is 50% for the civil servants compared to 25% for the unemployed.

The C.S.P is a composite variable, it combines several elements. To understand it, we retained the social category to which the student belongs, the type of housing and the place of residence. The type of housing is strongly

related to the social category. It is even one of its main elements.

Finally, the results found show the expected importance of the role of the social category, as defined here, in determining the educational success of students with an immigrant background. In fact, the average socio-professional category of cohorts belonging to the baccalaureate is significant and is positively correlated with school success. While for those belonging to the second, it is the socioprofessional category favored that is significant but negatively correlated with academic success. In addition, this variable is linked to other variable such as the absence of the student. In fact, students from disadvantaged social class families are absent more than their comrades from other social categories (middle and favored): 87,5% compared to 75,5% and 74,5%.

On average, the annual absences of pupils from the three social categories can be seen from the following result:

- Underprivileged class: 20 days.
- Favored class: 9 days.
- Middle class: 8 days.

The number of missed days is, therefore, on average higher for students from families with lower socio-economic status than among other students.

The journey from home to high school (in minutes) and the means of transport are significant only at the level of the baccalaureate and the second. In fact, the more the pupil goes from level to level, the more the path changes and so he can use a means of transport.

THOMAS (1954) concludes in an empirical study that there is no significant relationship between school dropout rate and the distance between home and school. The effect of distance, when long, is attenuated by the availability of private means of transport.

In the absence of these means, the student of a disadvantaged social category must sometimes travel a long distance several times a day. The student in these conditions and especially when his health does not allow him to spend enough physical energy, arrives exhausted at school.

Concentration would not be fully ensured upon arrival in the classroom. As a result, the understanding of certain notions escapes him. Students who have their own means of transportation invest the time and the physical energy saved in other school or out-of-school activities.

The award of the scholarship has a positive impact on school success, but is significant only at the baccalaureate and the second level.

4. Impact of behavioral variables

Certain behaviors such as cigarette, drug and/or alcohol use can have a negative impact on school performance, especially at the age of adolescence that characterizes high school students, who are the focus of this study.

As a teenager, the student often smokes in groups. This behavior often causes absences and delays to join the group of smokers, to which he belongs. This last attitude generates a break in the constitution of the student's knowledge resulting from the logical acquisition of notions.

According to our results, cigarette consumption has a negative impact on the school success of students in CM₂, in second and in the baccalaureate being significant at the last level. On the other hand, the drug consumption is very significant at the level of the CM₂, the 6th and the second and acts negatively on the academic success in the bachelor's degree.

The use of drugs and/or alcohol requires the student to waste more time and money. Moreover, the looking for money necessary for the acquisition of drugs and alcohol becomes a major concern of the student. When these consumptions become permanent, they cause a loss of concentration hindering the normal acquisition of knowledge. Drug and/or alcohol use is largely correlated with the cigarette consumption variable (40%). School results are related to this last variable which negatively influences it. The consumption of cigarettes, drugs and/or alcohol is linked to certain other school or environmental variables. Indeed, 3,8% of smokers do not live with their parents. 89% of them do not receive private lessons and 91,7% are not always helped by their families to do their school work. 47,8% do not feel comfortable in class, while 69,8% of student smokers feel comfortable with friends and 40% have problems with their teachers.

The consumption of these products is also linked to the absence variable. As a matter of fact, at the age of adolescence the student smokes most of the time in group, he must then often absent himself to satisfy his desire. The average number of missed days is:

- 08 days for non-consumers;
- 12 days for cigarette consumers;
- 25 days for alcohol consumers;
- 28 days for drug consumers;
- 32 days for the three products consumers.

Television is a decreasing function of school success from The CM₂ to the second with a great significance at the CM₂ level. However, this result changes when the students watch television with their parents and the influence then becomes positive from the CM₂ until the second and very significant at the CM₂ level. So the

existence of parents while the children are watching television is a determining factor of school success.

5. Impact of school variables

Finally, it remains to analyze the influence of school variables on school success. This includes the most difficult time in the period of exams and the activity the day before exams. The majority of education researchers agree on a negative influence of fear on academic performance.

Fear and anxiety destabilize the student during exams. LEGAL (1980) cites stress as a functional factor that negatively influences school outcomes. Other researchers find that fear and stress affect school engagement and consequently school performance (BENNACER (1991)).

The results of the model show that resting or having fun the day before the exam has a negative effect on school success. In other words, the fact of not revising the day before the exam acts negatively especially at the level of the CM₂ and the baccalaureate.

As for the relationship between the socio-professional category and the institution attended, the private establishments are composed only of pupils from higher and middle social classes. On the other hand, there is no pupil enrolled in private education and coming from a disadvantaged social category.

The membership in a private institution most often reflects a membership in a family of a high socio-economic and socio-cultural level, most often adopting the French language - exclusively or in combination with other languages - as language of communication within the family.

This last situation has a considerable effect on a sustained learning of the French language and the mastery of the different subjects taught at school especially for pupils who are not born in France.

Some authors speak of a positive relationship between the student's ambitions and his academic achievements (P.MALRIEU, 1976).

We can say that when the student believes in his academic success, he often invests the majority of his time in revising his lessons. This when presenting the principal activity of the student, can positively influence his school result. All the aforementioned variables and school performance allow the student to position himself with regard to the option. This attitude of the student, measured by the satisfaction of the orientation, has a positive influence on the school results.

The usefulness of training in the accumulation of cognitive knowledge and the increase of chances for a future job, can generate a satisfaction of the orientation.

Our results show that the more the student is not satisfied with his orientation, the more his school performance deteriorates. This result is pertinently evident in the baccalaureate, the 6th and the CM₂.

Problems with teachers can also influence student success. Indeed, this explanatory variable is significant at the level of the baccalaureate, the second and the CM₂ and acts negatively at the level of the 6th and the CM₂.

It is quite possible that when the student establishes bad relations with his teachers and his classmates the school is no longer for him a favorable learning environment.

GHARIB (1991) found a relation that he called "negative" between students with poor results and their teachers. The author adds that the best students are the ones who tend the most to establish "positive" relationships with their classmates. The student who has a school delay is often underestimated by his teachers and comrades; in the majority of cases he seeks his comrades outside the school.

VI. DISTRIBUTIONS OF PREDICTED AND OBSERVED VALUES OF SCHOOL SUCCESS

Finally, the evaluation of the distributions of the predicted and observed values of school success for the entire sample has proven to be relevant. The tables below show the different results obtained.

	Total	0	1
Total	311	280	31
0	267	260	7
1	44	20	24

Table. 1: Distribution of predicted and observed values of school success

The model correctly identifies 24 out of 44 students who passed their baccalaureate and 260 of the 267 youngsters who have not yet reached the baccalaureate's level and/or who have not passed their baccalaureate.

	Total	0	1
Total	311	118	193
0	139	102	37
1	172	16	156

Table. 2: Distribution of predicted and observed values of school success in second

The model correctly identifies 156 among 172 students who have succeeded in the second and 102 of 139 youth who have not yet reached the second and/or who have failed.

	Total	0	1
Total	311	18	293
0	42	13	29
1	269	5	264

Table. 3: Distribution of predicted and observed values of school success in the 6th grade

The model correctly identifies 264 among 269 students who have succeeded in the 6th and 13 out of 42 who have not yet reached the 6th grade and/or who have failed.

	Total	0	1
Total	311	10	301
0	13	8	5
1	298	2	296

Table. 4: Distribution of predicted and observed values of school success in CM₂

The model correctly identifies 296 out of 298 students who have succeeded in the CM₂ and 8 out of 13 who did not succeed.

Thus, our results are more successful in specifying the impact of certain determinants than in accurately predicting the behavior of young people.

VII. CONCLUSION

School success can be explained in a general way on the basis of objective elements that constitute the mode of socialization of young people: the family history, its trajectory, its way of life, its system of aspirations that determine its attitude towards school and social advancement.

It is important to note that success is not the privilege of a child or two in the family. It often concerns several siblings when it is not the whole assembly.

Throughout this study, we have tried to explain the determinants of school success of Moroccan immigrant students in France in the baccalaureate, the second, the sixth and in the CM₂.

The results corroborate the role of several variables already observed in similar studies carried out on school success with, however, some exceptions.

The results point out that the role of the family is complex, but that the personal variables, behavioral characteristics and variables of the school environment play a role that is traditionally found in several other studies.

Thus, we have highlighted how the family, the environment and the school play a key role in the schooling progress of the child.

The stability of the couple, of the residence, the regularity of life, the parents French proficiency, constitute favorable elements.

The results obtained thus make it possible to better understand the French school system and the role of the social, family and school environment on the school success of Moroccan immigrant students in France.

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