Difficulties studying at MOROCCO related of a delay academic career and inequality: results of investigations carried out by students in chemistry

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ABSTRACT:

Our research aims to provide data on learning disabilities in students scientific branches, and the causes of failure and Dropout of university students. In this research, we focus on the study of the existence of delays in the completion of schooling, behavior and work and those among them affected by inequalities in their studies.

519 chemistry students belonging to the Faculty of Sciences Ben M'sik at the University Hassan II Mohammedia - Casablanca participated in the survey. They are aged between 17 and 23 years and suffer no physical or mental disability. The questionnaire consists of 101 questions grouped into 8 themes. Our results indicate the existence of students experiencing various delays in their academic careers, students are upset during exams as to forget things they know very well, student are affected by inequalities related to financial resources, work capacity, family networks, occupation and educational level of parents

Keywords: delays - learning behaviors - Inequality.

1. Introduction and problem

This research was designed to show the existence of delays of schooling, to identify learning behaviors. Focusing on inequality which can cause school failure and dropout in the university.

2. Method

2.1 Participants:

The surveyed population consists of 519 students from 1st, 2nd and 3rd year of chemistry bachelor at university.

Tab1 Distribution year

	1 st year	2 nd year	3 rd year
Female	190	71	47
Male	164	27	12
Total	354	98	59

Both 2^{nd} and 3^{rd} year have an effective majority of Female (respectively 72% and 80%).. However, the proportion of male students is higher in S2 (46% male / 54% female) (Chi2 = 21.7, p> 0.001). The average age of students is 20 years; there was no significant difference between male and female students.

2.2 Measures:

Our questionnaire is made of 101 issues grouped in 08 themes. The first is the academic membership of the student (university, discipline, BA). The second theme asks on the school career (change of discipline, late at school ...), the third theme focuses on the frequency of contact with teachers, families and students, the fourth theme aims to provide data on the behavior of student learning, then there is the theme of self-esteem then the theme on the integration of graduates into the industry outlook, and the theme questioning the personal data (gender, age, siblings, civil status). The final theme focuses on health in 4 areas: general health, communication disorders, disorders impact, health practices and addictive behaviors.

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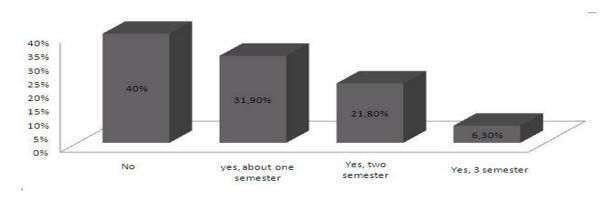
2.3Procedure

The survey was conducted in April, May and june 2013. The questionnaires were distributed to students at the end of a course. A period of 10 minutes was devoted to the presentation of the questionnaire, its goals and how to respond. Then, the following 25 minutes were allowed for students to complete the questionnaire. The questionnaires were collected immediately by the experimenter.

2.4Analysis:

After data collection (June 2013), we used SPSS software for data processing and analysis.

One question concerns the existence of delays in the completion of schooling, gave us important information that can be represented as follow:



Graph 1 Delay in studies

The majority of students (60%) report the existence a delay in their academic career.

LEARNING BEHAVIORS AND WORK

Our results show that 68.50% of the students are upset during exams as to forget things they know very well, 59.90% of the students are very anxious before the exam, despite the stress of exams 80.90% of the students are determined to study and prepare for their careers, 38% of the students are worried to complete their study.

Table 2 To what extent the following statements are relevant? (Scale 0 = not relevant at all to 6 = totally appropriate)

To what extent the following statements are relevant?	Not relevant	Relevant	Totally relevant
I often fear not to succeed at all	38.3%	16,20%	45,45%
I can concentrate long enough and lead a work term	44,70%	16,80%	38,50%
For me it is easier to learn and retain new facts and content	38,70%	19,40%	41,90%
In exam situation, I am often so angry that I completely forget things that basically I know very well	25,30%	6,20%	68,50%
Before an exam, most of the time I'm anxious	30,80%	9,30%	59,90%
I like to study and prepare myself professionally to the next	12,10%	7,00%	80,90%
I am not convinced that love of learning, books or intellectual work in general	74,10%	6,70%	19,20%
I will finish my studies because I can usually get by	25,90%	16,60%	57,50%
I have difficulties to finish my studies	47,90%	14,10%	38,00%

Table 3 Average rating on learning behavior and work

I often fear not to happen at all		Standard deviation	
I can concentrate long enough and lead a work term	3,22	2,116	
For me it is easier to learn and retain new facts and content	2,78	2,016	
In exam situation, I am often so angry that I completely forget things that basically I know very well	3,17	1,993	
Before an exam, most of the time I'm anxious	4,28	2,336	
I like to study and prepare myself professionally to the next	3,82	2,285	
I am not convinced that love of learning, books or intellectual work in general	4,95	1,85	
I will finish my studies because I can usually get by	1,33	2,089	
I have difficulties to finish my studies	3,85	1,964	
I often fear not to happen at all	2,67	2,194	

Based on the principal component factor analysis, we extracted two factors: one factor which reflects the level of stress and a second that reflects the level of difficulty.

When analyzing the stress factor, there is a significant change in stress by gender (F=8.53; p<0.004) and semester (F=3.13; p<0.045). Indeed, girls are more stressed than boys (respective mean: 0,11 et -0,17) and students of S6 are more stressed than those of 1st and 2sd years (respective mean: 0,29; 0,02 et -0,06).

As regards to the difficulty factor, a significant variation is observed by gender (F=0.11; p<0.731) and semester (F=2.71; p<0.067). Indeed, girls have more difficulty than boys (respective mean : 0,013 et -0,019) and students of S4 have more difficulties than those of S2 and S6 (respective mean : 0,2; -0,15 et -0,03).

STUDENTS AFFECTED BY INEQUALITY IN THEIR STUDIES.

At least 20% of the students say they greatly suffer from inequalities that may affect the success of their studies (scores 4 to 6) for all proposed sources of inequality.

The most experienced inequalities relate to relate to occupation and study level of the parents (74.1%), financial resources (44.1%), acquired working abilities (40, 7%) and family social networks (35.7%).

Table 4 Degree to which students feel victim of inequality on the success of their studies (scale 0 = no victim at all to 6 = very strongly victim)

Types of inequality	Not victim	Victim	Strongly victim
Inequality of talent	67,6%	12,1%	20,30%
Inequality in work skills acquired at school	46,60%	12,70%	40,70%
Inequality of financial resources	39,30%	16,60%	44,10%
Inequalities in family cultural environment	41,30%	16,80%	41,90%
Inequalities related to parents' occupations	52,00%	11,70%	36,30%
Inequalities related to family networks of relationships	52,20%	12,30%	35,70%
Inequalities related to levels of education of parents	49,10%	13,10%	37,80%

3. **Conclusions:**

Our results indicate that the majority of students (60%) reported the existence of a delay in their academic career, and that 38% of students have concerns for their education.. Students indicated that the most experienced inequalities relate to financial resources, work capacity acquired, family networks, occupation and educational level of parents.

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