


## Academic Trajectory of the Students of the Bachelor's Degree in Nutrition of C U UAEM Amecameca Accepted in the Second Call for the Admission Examination (Generations 2018B and 2019B)

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### **ABSTRACT**

The objective of this research is to analyze the academic trajectory of the students of the Bachelor's Degree in Nutrition of the University Center UAEM Amecameca, dependent of the Autonomous University of the State of Mexico, compared to the trajectory of the global group of students accepted in those years, particularly on their dropout and failure rates. We also sought to determine the effects of gender on these rates. The research approach was quantitative, the design was non-experimental, longitudinal and descriptive analytical. We had the support of the Direction of the academic space, the Tutorial Program, the Department of School Control and the Statistical Agenda of the institution. Based on the results, it was shown that these indexes are higher in second chance students than in the group of accepted students, and that gender and level of studies have an influence on these indicators.

**Keywords:** Dropout, Acceptance, Acceptance, Rates, Regularization, Failure

## **1 INTRODUCTION**

"The selection process for higher education in Mexico has followed the trend of using standardized tests, mainly those designed by the National Evaluation Council (CENEVAL) EXANI II" (Buendía, 59).

According to the same author:

This selection process assumes that students choose a set of options in order of preference and that admission to them will depend solely on the knowledge and skills of the test takers. In such a way that the exam does not consider, among other elements, the school of origin and the socioeconomic level of the students, promoting the reproduction of a highly meritocratic society, reaffirming, among other things, that educational possibilities depend largely on the merits and/or amount of individual effort of the subjects Bordieu (1998, p.2003).

In this sense, the Autonomous University of the State of Mexico (UAEM) applies the UAEMex Index, which considers a percentage of the result obtained in the EXANI II and gives another percentage to the average that the applicant obtained in high school, the relationship of percentages varies from one Faculty or University Center to another or another; in the case of the Bachelor's Degree in Nutrition, in the University Center UAEM Amecameca, 90% is given to the result of the EXANI II and 10% to the average of the baccalaureate.

The Autonomous University of the State of Mexico (UAEM), like other universities in the country, has implemented a series of measures to increase coverage in its classrooms, among these measures are: the creation of new spaces for the attention of young people, the creation of new careers and the implementation of the second call for admission exams in order to accept more undergraduate applicants. This second call is only intended for undergraduate programs with low demand or to fill vacancies left by applicants who were accepted in the first call but who, for some reason, decided not to complete their enrollment process.

The Rector Development Plan 2017-2021 states that "From 2008 to 2016 there has been a 60% increase in the overall enrollment of accepted students, a figure that reveals the significant effort to serve more students" (p. 61).

According to the General Development Plan 2009 -2021 of the Autonomous University of the State of Mexico (Universidad Autónoma del Estado de México)

The UAEM will be able to promote an orderly growth of enrollment, in such a way as to guarantee admission and permanence, with equity and relevance, to all persons who show the capacity, as well as the interest, to pursue professional studies. (p. 50).

The same document establishes that "With respect to the admission of students, a model that guarantees the adequate selection of the skills required by the educational program that the person wishes to pursue will be implemented, thus guaranteeing the promotion and permanence of the student body" (p. 51).

The UAEM Amecameca University Center offers seven undergraduate degrees (Administration, Political Science and Public Administration, Accounting, Law, Hispanic Language and Literature, Veterinary Medicine and Animal Husbandry, and Nutrition), a Master's degree in Agricultural Sciences and Natural Resources, a Master's degree in Health Sociology, a Doctorate in Agricultural Sciences and Natural Resources, and a Doctorate in Sustainability for Development.

Of the seven bachelor's degrees, two are in low demand, two are in medium demand and three stand out for their high demand.

The bachelor's degree in Nutrition is one of the most in-demand bachelor's degrees, with three groups of new students per generation. This degree occasionally issues a second call to cover the places

that, for some reason, were not filled by some applicants accepted in the first call and who did not complete their enrollment process.

The present study analyzes the academic trajectory of students who entered the first semester in the 2018B and 2019B cycles, considering their dropout and failure rates, in order to compare their performance with respect to the group in general with which such trajectory has been given.

## Target

To analyze the academic trajectory of the students of the Bachelor's Degree in Nutrition of the University Center UAEM Amecameca, dependent of the Autonomous University of the State of Mexico, accepted in the second call, compared to the trajectory of the global group of students accepted in those years, particularly on their dropout and failure rates. We also sought to determine the effects of gender on these rates.

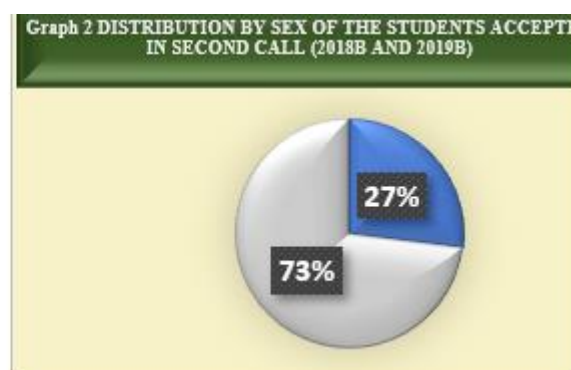
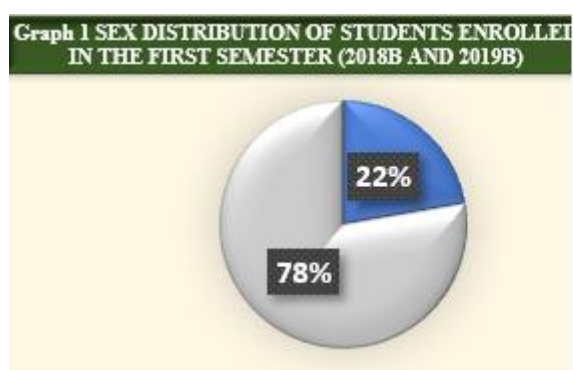
## 2 METHODOLOGY

The research approach was quantitative, non-experimental, longitudinal and descriptive analytical design. For data collection, information from the School Control Department was used regarding the students (26) accepted in the second opportunity of the admission exam. The group consisted of male and female students of the Bachelor's Degree in Nutrition (Generation 2018 with 11 cases and Generation 2019 with 15 students). The most outstanding results are presented in tables and graphs.

## 3 RESULTS

Nutrition is the bachelor's degree with the highest number of new admission groups (3 per period). In 2018b it accepted 11 students in the second call and in 2019b 15 students with the same characteristic.

When comparing the distribution by sex of the first semester students of the Bachelor's Degree in Nutrition, the proportion of men accepted in the second call for applications is greater than that of those enrolled in the first semester in general, for this degree. See graphs 1 and 2.



Source: Data collected at the School Control Department.

### School dropout

As shown in Table 1, students were received in the second call for the 2018b and 2019b cycles. In the case of the 2018b generation, 44% of women and 50% of men have dropped out, the overall dropout of these students is 45%, very high figures with respect to the general dropout rates of the degree, which for the years 2018-2019 and 2019-2020 did not exceed 20% for men, 11.5% for women and 12.6% overall.

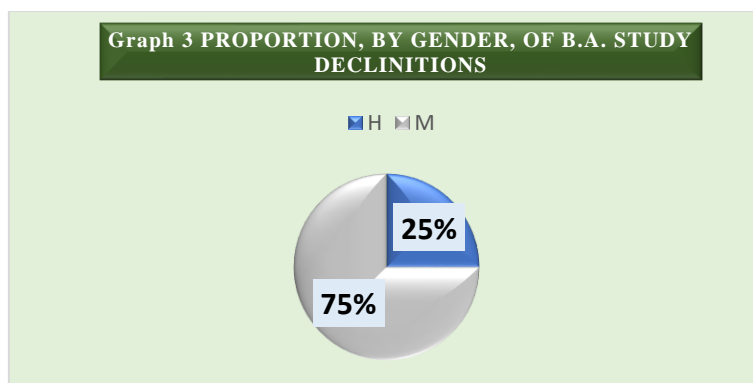
In the case of the 2019b class, there were no male dropouts and 40% of the women dropped out from the first to the third semester; overall, the dropout rate is 27%; as in the previous class, the rate is very high.

Table 1 Academic status of accepted students in second call 2018b - 2019b

LICENSING	2018B		2019		TOTAL		
	H	M	H	M	H	M	
Nutrition	1	4	0	4	1	8	
	0	1	3	2	3	3	
	1	2	0	0	1	2	
	0	2	2	4	2	6	
TOTAL	2	9	5	10	7	19	
ABANDONMENT		IRREGULAR		REGULARIZED		REGULAR	

Source: Data collected at the School Control Department.

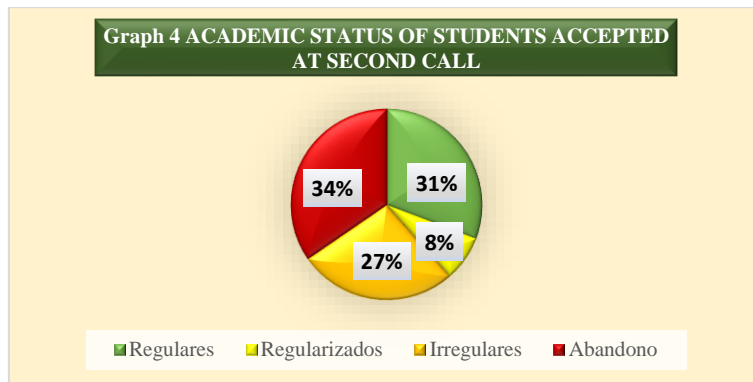
A comparison of the proportions of men and women who have dropped out of undergraduate studies in nutrition shows that men drop out one third as much as women. See graph 3.



Source: Data collected at the School Control Department.

### Academic background

The academic status of the 26 students accepted between the two periods is presented in graph 4.



Source: Data collected at the School Control Department.

According to the information provided by the Tutorial Program Coordinator, the situation of the 17 continuing students in terms of the level of risk of failing in their objective of completing their bachelor's degree, considering the traffic light managed by said program, is shown in Table 2.

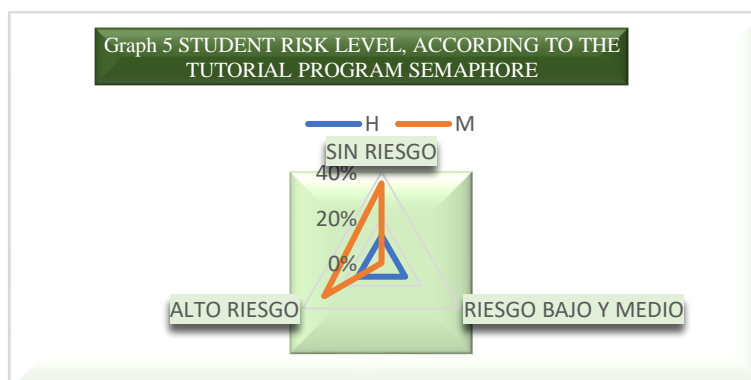
Table 2 Risk level of the students, according to the traffic light of the Tutorial Program.

		NO RISK	LOW AND MEDIUM RISK	HIGH RISK	TOTAL
2018	H	0	1	0	1
	M	2	0	3	5
2019	H	2	2	1	5
	M	4	0	2	6
<b>TOTAL</b>		<b>8</b>	<b>3</b>	<b>6</b>	<b>17</b>

Source: Data provided by the Tutorial Program Coordinator.

The above shows that in addition to the 9 students who have already dropped out, there are 6 more at high risk of failing to obtain the degree, which would mean that 58% would not complete their bachelor's degree studies.

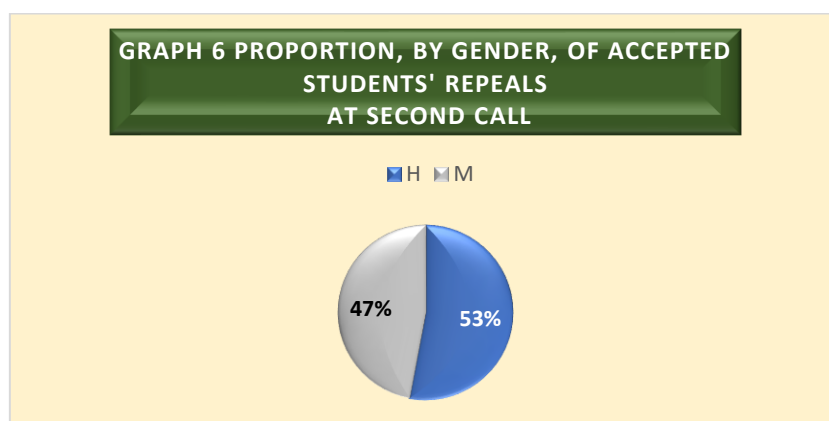
When broken down by sex, female students are the ones who have the highest percentage of students who pursue the degree without risk, but they are also the ones who have the highest rate of high risk for the career, men have the highest rates in low risk and without risk. See graph 5



Source: Data provided by the Tutorial Program Coordinator.

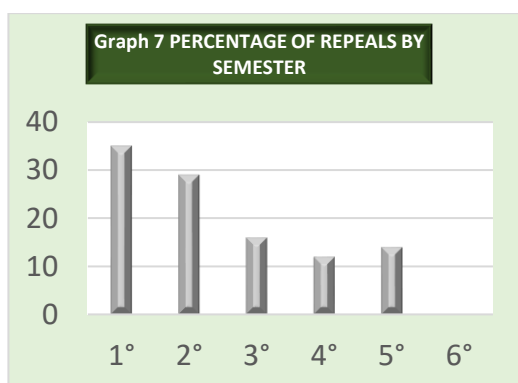
## Failure rates

Regarding the proportion of failure rates (considering both students who are currently irregular and those who have been regularized), students accepted in the 2018b generation have a 45% failure rate and the 2019b generation has a 27% failure rate. It is women who present a lower difference by six percentage points with respect to men (47% vs 53%). See graph 6

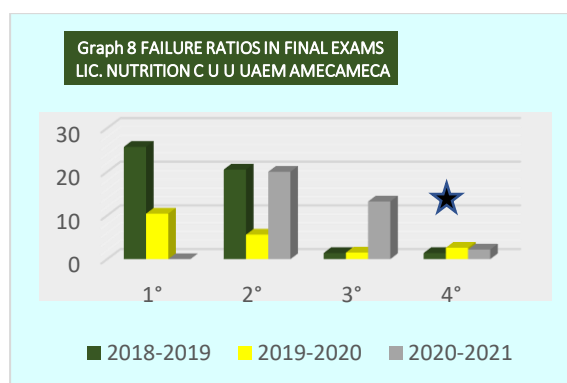


Source: Data collected at the School Control Department.

In terms of the trajectory of studies, the failure rate decreases significantly after the third semester. This is consistent with the trend of the bachelor's degree, which in general decreases its failure rates as one progresses through the degree program. See graphs 7 and 8.



Source: Data collected at the School Control Department.



Source: UAEM Statistical Agenda 2019, 2020 and 2021.

There is a lack of information on the first year of the course.

## 4 CONCLUSIONS

The implementation of the Second Call to take full advantage of the facilities of the Universidad Autónoma del Estado de México has resulted in opening more opportunities to study to young people who for some reason did not get their acceptance in the first stage, with a view to form more prepared citizens, able to successfully face the challenges that life has in store for them.

In the case of the Bachelor's Degree in Nutrition, taught at the UAEM Amecameca University Center, some of these students are brilliant and very committed to the career, but unfortunately a high percentage of those accepted drop out, it should be noted that of the total number of students who dropped out, 78% were irregular.

The results show that the dropout and failure rates are higher in students accepted in the second call, compared to the students enrolled in the career as a whole. This leads us to consider, for a new study, to investigate the characteristics of the applicants to enter through the second call, since these can be very varied, it can be detected that some applicants took the entrance exam in the first call and did not manage to enter; applicants who did not take the exam in the first call and take it for the first time in the second call; there will also be those who took the exam in the first call for another degree, either in the same UAEM or in another institution and were not accepted, etc. This may provide an answer as to why the dropout and failure rates are higher in the applicants who are accepted in the second call and also to warn why among these students there are those who are very outstanding in the studies of the degree, leading an impeccable trajectory. It is considered convenient to have an interview with the applicants to the bachelor's degree to know their aspirations and let them know in more detail what they are going to receive in their training, this would be plausible for all the applicants, but due to the lack of resources, it could be done at least with those of the second call.

On the other hand, the same results show that indicators such as dropout and failure rates (mainly in the first year of the degree program), terminal efficiency and the graduation rate are negatively affected.

Another measure to support students who entered in the second call for applications is for tutors to strengthen their work with them in particular, thus reducing the possibility of dropping out and failing.

Without being a motive for the study, but in the investigation of data for the same, it could be detected that the dropout and failure rates of the bachelor's degree in general are very high during the first two years of the career, which leads to consider pertinent the realization of an investigation on the causes that generate this phenomenon due to the importance it has for the success expected of the students and the improvement of the levels in the indicators of the bachelor's degree.

The results show that women are at greater risk than men of dropping out of undergraduate studies. In this research, the causes that provoke a proportionally higher dropout rate in women than in men are still unknown; the difference between the two sexes is probably due to multiple factors that are worth investigating for future studies. It is also interesting to investigate the causes of the difference in failure rates.

## REFERENCES

Buendía Espinosa, Ma. Angélica, & Rivera del Río, Roberto (2010). Selection model for admission to higher education: the case of UACH. *Revista de la educación superior*, 39(156), 55-72. Retrieved October 10, 2022, from [http://www.scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S0185-27602010000400004&lng=es&tlng=es](http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-27602010000400004&lng=es&tlng=es).

Autonomous University of the State of Mexico (UAEM). General Development Plan 2009 -2021  
Autonomous University of the State of Mexico. M. en C. Eduardo Gazca Pliego Rector  
General Development Plan 2009-2021 (uaemex.mx)

Autonomous University of the State of Mexico (UAEM). Institutional Development Rector Plan 2017-2021  
Universidad Autónoma del Estado de México Dr. in Ed. Alfredo Barrera Baca Rector  
PRDI 2017 - 2021 (uaemex.mx)

Autonomous University of the State of Mexico (UAEM). Statistical Agenda 2019.  
Statistical Agenda 2019 (uaemex.mx)

Autonomous University of the State of Mexico (UAEM). Statistical Agenda 2020.  
Universidad Autónoma del Estado de México - Universidad Autónoma del Estado de México  
(uaemex.mx)

Autonomous University of the State of Mexico (UAEM). Statistical Agenda 2021.  
Statistical Agenda 2021 (uaemex.mx)