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Artículos científicos

Estudio de la tutoría académica de un posgrado consolidado y su impacto en la trayectoria y egreso

*Study of the academic tutoring in a consolidated postgraduate and its
impact on the trajectory and graduation*

*Estudo da tutoria acadêmica de um curso de pós-graduação consolidado e
seu impacto na trajetória e graduação*

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Resumen

La tutoría académica se ha considerado una herramienta pertinente para lograr el egreso oportuno de los estudiantes, disminuyendo así la deserción escolar. Sin embargo, en las últimas generaciones del posgrado en estudio, el egreso no ha sido oportuno. Por lo tanto, resulta necesario evaluar el proceso tutorial del programa para trabajar en la mejora continua del acompañamiento del estudiante. Para ello, se realizó una investigación con enfoque mixto, de tipo documental, descriptiva, explicativa y correlacional. A partir del análisis de diversas fuentes especializadas en el tema, se caracterizó la problemática e identificaron las



causas de esta. Asimismo, se midió el grado de relación entre las dimensiones y variables; y se aplicaron los métodos de juicio de expertos y Alfa de Cronbach para la validez del instrumento. Posterior al análisis cuantitativo, se procedió al cualitativo. Los resultados permiten visualizar un seguimiento constante y oportuno respecto a la trayectoria escolar. Sin embargo, se aprecia la falta de planeación entre el tutor y el tutorado, acorde a las necesidades propias de cada estudiante para el mejor aprovechamiento escolar. Asimismo, los análisis correlacionales determinan una relación considerable entre las dimensiones resultantes del proceso de operacionalización. Por lo anterior, es posible concluir que las tutorías académicas, de acuerdo a la percepción de los estudiantes, resultan un apoyo real a su trayectoria y egreso. De no impartirse correctamente, esto puede verse reflejado de forma negativa en el proceso de titulación y en el rebase de los tiempos establecidos para la misma.

Palabras clave: Educación superior, tutoría, acompañamiento académico, egreso, trayectoria académica.

Abstract

Academic tutoring has been considered a tool to achieve the graduation on time of students and decrease school dropout. However, in the last generations of the postgraduate under study, the obtaining of degree has not been on time, so it is necessary to evaluate the process of the tutorial program, to work on the continuous improvement of the student's accompaniment. For this purpose, a research was carried out with a mixed, documentary, descriptive, explanatory and correlational approach, through the analysis of various specialized sources in the subject, in order to characterize the problem and identified this causes, at the same time, measured the degree of relationship between dimensions and variables; and the methods of judgment of experts and alpha of Cronbach were applied, in order to validate the data collection instrument, and after the quantitative analysis, the qualitative analysis was carried out. The results allow to visualize a constant and opportune about the school trajectory, however, it is appreciated the lack of a planning between the tutor and the tutoring, according to the needs of the student, so that, he be able to take advantage of the postgraduate. Also, the correlational analysis determines a considerable relationship between the dimensions resulting from the operationalization process. Therefore, it is possible to conclude that academic tutorials, according to the perception of students, are real support for their trajectory and the obtaining of degree, and if does not apply correctly, this

can be negatively reflected in the degree process and in the exceed of the time established for the degree.

Keywords: Higher education, tutoring, academic support, graduation, academic career.

Resumo

A tutoria acadêmica tem sido considerada uma ferramenta relevante para conseguir a formatura dos alunos em tempo hábil, reduzindo assim a evasão escolar. Porém, nas últimas gerações da pós-graduação, a graduação não tem sido oportuna. Portanto, é necessário avaliar o processo tutorial do programa para trabalhar na melhoria contínua do acompanhamento do aluno. Para isso, foi realizada uma investigação com abordagem mista, do tipo documental, descritiva, explicativa e correlacional. Com base na análise de diversas fontes especializadas no assunto, caracterizou-se o problema e identificou-se suas causas. Da mesma forma, mediu-se o grau de relacionamento entre as dimensões e variáveis; e o julgamento de especialistas e os métodos Alpha de Cronbach foram aplicados para a validade do instrumento. Após a análise quantitativa, procedeu-se à qualitativa. Os resultados permitem visualizar um acompanhamento constante e pontual da trajetória escolar. No entanto, aprecia-se a falta de planejamento entre tutor e tutorado, de acordo com as necessidades de cada aluno para o melhor aproveitamento escolar. Da mesma forma, as análises correlacionais determinam uma relação considerável entre as dimensões resultantes do processo de operacionalização. Diante do exposto, é possível concluir que as tutorias acadêmicas, na percepção dos alunos, são um verdadeiro suporte para sua carreira e graduação. Se não for ministrado corretamente, isso pode se refletir negativamente no processo de titulação e na ultrapassagem dos tempos estabelecidos para isso.

Palavras-chave: Ensino superior, tutoria, acompanhamento acadêmico, graduação, trajetória acadêmica.

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Introduction

The recent pandemic has highlighted the need for comprehensive, human and quality professional training, capable of adapting to different contexts to identify solutions and new opportunities for economic and social development. In this sense, academic tutoring is of interest for the achievement of adequate professional training.

Various authors have addressed the study of tutoring in higher education (De la Cruz, 2017; Aguilera, 2019; Carrillo and Ruiz, 2017; Boroel et al., 2018; López, 2017; Sainz and Ceballos, 2021; Bejar, 2018), where it is agreed that, in addition to academic practices for the generation of knowledge, there is support for the social and emotional development of the student.

According to Obaya and Vargas (2014), the purpose of tutoring is to promote links for reflection and dialogue that are the pillar for the construction of interrelationships between students, in such a way that it contributes to the development of socially and professionally required competencies of according to its context.

For their part, Romero et al. (2014) suggest that tutoring is the accompaniment, monitoring, motivation and support of the student's learning process to improve academic performance, solve school problems and develop study, reflection and social coexistence habits.

At the Universidad Veracruzana, the tutorial process is of a personal, continuous, coherent and cumulative nature, and in accordance with current institutional regulations, its purpose is to provide timely monitoring of the students' school trajectory under the tutelage of an academic (tutor) (Universidad Veracruzana [UV], s.f. -d). In this sense, in each Academic Entity, with the support of a Coordination responsible for carrying out the planning of the tutorial exercise and safeguarding the evidence for validation (Regulations of the Institutional Tutoring System, 2009), tutorials are developed in three phases per school period. (beginning, follow-up and closing period).

For each of the tutorials carried out, each tutor generates the corresponding reports, and at the same time, registers them in a platform called the Comprehensive Tutoring System (SIT), which makes it easier to detect those students who are at academic risk (Veracruzana University [UV], s.f. -a).

At the same time, the Graduate Tutoring program of the Universidad Veracruzana also has the purpose of supporting students in solving problems of an academic nature, in addition to seeking to develop research activities. Therefore, at the level of postgraduate studies,

academic tutoring is considered part of the Tutorial Program, as well as the thesis or final project direction and advisory services. (Universidad Veracruzana [UV], s.f. -g).

Under the previous context, the postgraduate program of Specialization in Foreign Trade Administration (EACE), offered by the Universidad Veracruzana since 1994 and incorporated into the National Postgraduate Program for Quality (PNPC), has established a tutorial system to follow up on the students' school trajectory and guarantee terminal efficiency, with the aim of ensuring and improving the quality of student progression within the postgraduate study program (UV, s.f. -a).

Although it is true that since the generation of 2014 a terminal efficiency of the educational program has been maintained above 90% and zero school dropout, in the last three generations the terminal efficiency has not been timely. In addition, it has been identified that in each generation at least one student leaves the program (Universidad Veracruzana [UV], s.f. -b). Therefore, faced with this problem, it is necessary to carry out a study that allows the implementation of preventive measures so that students can graduate in the established times and avoid affectations that are reflected in the indicators of academic competitiveness of the educational program.

This leads us to ask the following question:

- *Does the tutorial system of the study program really achieve timely orientation of the tutored for decision-making related to the construction of their school trajectory, according to their expectations, abilities and interests?*
- *Does the accompaniment of the tutor allow the timely identification of situations of academic risk and training needs, for the correct establishment of strategies that contribute to the school trajectory?*
- *Does the tutorial program of the specialization encourage the completion in time and form of the study plan?*

Based on the above, it is possible to define the following hypotheses:

Hypothesis 1a: The tutorial program of the Specialization in Foreign Trade Administration does not contribute to monitoring the school trajectory and timely graduation from the educational program

Hypothesis 1b: The tutorial program of the Specialization in Foreign Trade Administration contributes to monitoring the school trajectory and timely graduation from the educational program

Conceptual and contextual framework

The tutoring process in higher education must guarantee pertinent accompaniment as a guide in student decision-making in both the academic and social spheres. It must be an inclusive and personalized process, according to the needs of the new generations.

Obaya and Vargas (2014) mention that the tutoring process works together in four areas: integration between students and the dynamics of the school, monitoring of the academic process of students, coexistence in the classroom and school, and orientation towards a life project. For his part, Núñez (2021) suggests that, for a significant contribution, four dimensions must intervene in the tutoring process: technological, administrative, social and pedagogical aspects. In turn, Aguilera (2019) proposes four dimensions that tutoring should address: knowledge, academic, personal, and professional, emphasizing that the accompaniment should also guide the graduate in their professional career beginnings.

The development of the tutorial must consider a methodological planning related to the context in which it is carried out, with specific objectives for each of its phases (when it is carried out). In addition, it must include relevant tools that make it easier for the tutor to offer solutions to possible situations of a school nature (learning and/or administrative), personal and professional, and that contribute to the fulfillment of their goals and to reduce dropouts and school lag.

In this regard, Muñoz et al. (2015), Rodríguez (2014) and Ángulo and Urbina (2021), mention the close relationship of tutoring with the monitoring of graduates, stating that tutoring, as a support process between teachers and students, consists of guiding the academic development of the student. student in order to facilitate their personal development. Therefore, the importance of follow-up studies of graduates lies in knowing where and how they are developed, in order to work on continuous improvement to meet the needs required in professional preparation, through the tutorial process.

Castro et al. (2020) conclude in their research on the factors that generate school dropout, that a considerable percentage of students, after "disengaging" from their professional studies, resume their training and successfully obtain the academic degree; so the work of the tutor is vital for this. In this sense, tutoring is important for the follow-up of graduates, by allowing the link between graduates and the institution to be maintained.

At the same time, based on the information issued by graduates about the experience of their training and that of employers, it is possible to identify needs in the labor market. From them, tools applicable to the following generations can be designed. Likewise, it allows generating

an evaluation of the tutorial processes, to work on the continuous improvement of the accompaniment and follow-up activities.

The foregoing allows not only to identify the tools and platforms through which the student develops adequate communication with his tutor and, in this way, obtains relevant information during his academic career, but also to favor the employability of the graduates. Currently, the EACE tutoring process is intended to record academic progress, trying to avoid dropouts and falling behind in school and provide follow-up on the extracurricular activities of postgraduate students (Universidad Veracruzana [UV], s.f. -f). Likewise, its objective is to monitor the process of titling and development of the research corresponding to it.

The EACE tutoring focuses on attention to the academic, administrative and professional field. In other words, the tutorial sessions exclusively address topics typical of the school trajectory, research development and extracurricular activities, such as attendance at conferences, talks and field visits (UV, s.f. -a). There are five formats for monitoring the tutoring process: individual tutoring format, complementary activities format, business log format, relationship project monitoring format, and research work monitoring format. These can be consulted by tutors and students through the institutional page of the EACE (UV, s.f. -g).

During the school period, the tutorial process is developed under the following considerations:

1. Once the school enrollment is defined, the members of the Basic Academic Nucleus (NAB) of the educational program are assigned as tutor and director of the research project of each student, being the same academic who fulfills both roles.
2. Every month, at the end of each educational experience completed, a tutorial session is held and each student is responsible for recording the progress of the research project in the corresponding formats, as well as the result obtained in the educational experience that concludes.
3. For each tutoring session, the Coordination of the study program determines a period of one week for its completion, in which the student must meet with her tutor and prepare the evidence corresponding to the session.
4. The delivery of evidence is made to the Specialization Coordination, who validates and safeguards it, together with the personal files of the students.
5. Based on the timely delivery of evidence, two Educational Experiences of the program are evaluated: Complementary Activities and Linkage Project.

6. Each tutor is responsible for registering the tutorial sessions in the Institutional Tutorial System (SIT), for their validation and evaluation by the Coordination of the educational program.

The intention of the monitoring described above is that the teacher, in his role as tutor, not only keep track and monitor the performance of his tutors through the online program called SIT of the UV, but also, through the internal system, support students to find the solution to specific problems in a field of knowledge, resolve doubts or questions about specific topics in their domain, guide students or work teams in the definition and follow-up of export projects, and establish, together with the student, the program of activities that will serve for their professional training and degree.

Materials and methods

To carry out the present investigation, the type of documentary investigation was applied, relying on sources in specialized magazines on the subject and in articles with opinions. This made it possible to clearly understand the conceptualization process, consequently obtaining the abstraction of the phenomenon with the deductive method. As a result of the conceptualization, a type of descriptive research was carried out in order to describe, in all the frameworks that made up the state of the art, a reality, that is, to characterize the object of study in a specific situation. In the same sense, we can infer that a type of explanatory research was applied, since it was not only an attempt to describe the problem, but also an attempt to find its causes. Finally, it was of a correlational type, since it measured the degree of relationship between dimensions and variables.

The problem identified regarding the additional time that students are requiring to complete their degree process versus academic tutoring, requires both a quantitative and qualitative analysis, according to Rodríguez et al. (2015). Being an indicator of evaluation of academic competitiveness, whose quantitative dimensions reflect qualitative aspects of factors that intervene in the processes of permanence and graduation of students, there is an urgent need to carry out serious research to analyze the variables of academic performance aligned with the processes of tutoring and academic progress. Consequently, the research approach is of a mixed type.

Instrument Design

As a result of the conceptualization process, the operationalization was proceeded, so that, from the deductive method, the concepts that make up the theory are specified in empirical variables or indicators (Cea, 2012). Therefore, and according to Becker (1998), before measuring, it should have been clear in the delimitation of the object of study and this was carried out with the processes described above.

As a result of the operationalization process, an instrument was designed with the purpose of analyzing the institutional tutoring program of the EACE. The objective was to determine, from the perspective of the students, the impact on their school trajectory and their graduation process. Three dimensions were established. The first dimension, called "preventive", had the objective of identifying the opportune orientation for decision-making related to the construction of the student's school trajectory, according to their expectations, abilities and interests. This dimension was made up of two indicators and eight items. Table 1 shows its structure.

Tabla 1. Preventive dimension

Indicator	Items
Trajectory planning	At the beginning of your studies, the tutor informed you about the curriculum map and the credit system.
	At the beginning of your studies, the tutor provided you with information regarding academic mobility.
	At the beginning of your studies, the tutor provided you with information regarding internships.
	At the beginning of your studies, the tutor provided you with information regarding participation in academic events.
	At the beginning of your studies, you developed a work program with your tutor, according to your needs.
Consideration of individual needs and difficulties	The tutor supported you in identifying strengths and weaknesses to guide your trajectory based on them.
	The tutor provided guidance and directed your academic path according to your personal and professional interests.
	The tutor showed interest in your comprehensive education.

Note. Own work.

The second dimension was defined as "permanence" and its objective was to evaluate the continuous accompaniment of the tutors in the timely identification of situations of academic risk and training needs. This would make it possible to establish strategies that contribute to the completion of the students' school trajectory within the established

deadlines. This dimension was made up of two indicators and 15 items. Table 2 shows its structure.

Tabla 2. Dimension of permanence

Indicator	Ítems
Problem-solving	Throughout your academic trajectory, the tutor resolved your academic doubts.
	Throughout your academic trajectory, the tutor resolved your administrative inquiries.
	Throughout your academic trajectory, the tutor guided you in learning-related problems.
	Throughout your academic trajectory, the tutor guided you in issues related to your classmates.
	Throughout your academic trajectory, the tutor guided you in problems related to teachers.
	Throughout your academic trajectory, the tutor guided you in personal and family issues.
	Throughout your academic trajectory, the tutor supported you in special situations due to illness or disability.
	Throughout your academic trajectory, the tutor appropriately referred you when specialized attention was needed.
	The academic tutor provided support in resolving conflicts that arose during your academic trajectory.
	The academic tutor demonstrated being qualified and up-to-date in university regulations.
Monitoring the formation	The tutor conducted a minimum of three tutoring sessions per semester.
	The tutor was aware of your grades and earned credits.
	Throughout your academic trajectory, the tutor demonstrated interest in your learning process and academic performance.
	You received constant feedback from the tutor regarding your academic trajectory.
	Throughout your academic trajectory, you maintained constant communication with your tutor regarding academic matters.

Note. Own work.

Finally, the third dimension was called "graduation", and its objective was to evaluate how the activities are promoted to achieve the conclusion of the study plan in time and form, as well as the integration to the labor field. This dimension was made up of two indicators and seven items, which can be seen in Table 3.

Tabla 3. Graduation dimension

Indicator	Ítems
Academic actions	The tutor demonstrated knowledge of the curriculum of the educational program.
	The tutor supported the establishment of strategies aimed at better academic performance.
	The tutor encouraged the participation in activities that would have an impact on the development of productive or social sectors.
Obtaining a diploma (graduation)	The tutor guided you in the outreach project.
	The tutor provided guidance for a correct progress in the outreach project.
	The tutor contributed to the timely completion of the outreach project.
	The tutor guided you in the procedures and processes for the presentation of the project.

Note. Own work.

The instrument design included a Likert-type scale, it was coded with ordinal variables on a scale from 1 to 4, where 1 represents the lowest value and 4 the highest. The categories are identified as never, sometimes, often, and always.

In all types of research, it is important to apply instrument validation techniques and methods in order to obtain real conclusions about the study carried out (López et al., 2019). Therefore, it is important to assess the reliability, validity, robustness, clarity and structure properties of the instrument.

Instrument Validity and Reliability

For this study, two methods of instrument validity were applied: the first was expert judgment and the second, Cronbach's Alpha. The first method verified the reliability of the instrument, in which, according to Cabero and Llorente (2013), cited by Garrote and Rojas (2015), five people were asked to file a lawsuit against the instrument in question. For this, judges were selected according to the proposal of Escobar and Cuervo (2008), where the academic training of the experts, their experience and recognition in the community, as well as their experience in measurement and evaluation were considered. However, to estimate the reliability of the expert judgment, the degree of agreement between them must be determined, since a judgment includes subjective elements (Aiken, 2003). For this reason, the Fleiss Kappa coefficient was applied, in which the application of Cohen's Kappa index was generalized to measure the agreement between the codings of the instrument's nominal data.

Fleiss, citing Torres and Pereda (2009), generalized the application of Cohen's Kappa index to measure the agreement between more than two coders or observers for nominal and ordinal

scale data, determining that if the value range is 0.40 - 0.60, considered a regular agreement strength, 0.61 - 0.75 is considered good and greater than 0.75 excellent.

The categories that were evaluated by the judges were sufficiency, to determine if the items of the same indicator are enough to obtain its measurement, with a result of 0.89; coherence, to measure the logical relationship with the indicator, whose value obtained was 0.87; relevance, to determine the importance of the item and if it should be included, the result was 0.70; and clarity, to determine their understanding, with a value of 0.84.

The results indicate that the instrument has an excellent agreement strength for the sufficiency, coherence and clarity criteria; and a good strength of agreement for the relevance criterion. Due to what was previously stated, there is a valid and reliable instrument based on the results of the coefficients.

The second method used to validate the instrument was Cronbach's Alpha, which measures reliability and reliability by using an index to determine the type of internal consistency of a scale. In other words, it evaluates the magnitude of the correlation between the items of an instrument. The result obtained from Cronbach's Alpha in a pilot survey applied to 15 students with 30 items was 0.971, which indicates that the instrument has excellent consistency and can be applied, according to what was exposed by George and Mallery (2003, p. 231).

Population and sample

For this research, EACE students assigned to the Faculty of Accounting and Administration were considered as the population under study. The generations from 2016 to 2020 were taken into account. Table 4 shows the results by applying the simple random sampling formula for finite populations, considering a confidence level of 95% and a maximum estimated error value of 5%. In this way, the instrument was applied in a stratified manner to obtain the data that will be processed.

Tabla 4. Population and sample of students

Generation	Admission	%	Sample 98	Graduation date
2016- 2017 (Previous plan)	26	25%	24	August -17
2017 – 2018 (Previous plan)	22	21%	21	August -18
2018 – 2019 (Previous plan)	26	25%	24	August -19
2019 - 2020 (New plan)	18	17%	17	December -20
2020 - 2021 (New plan)	13	12%	12	December -21
Total	105	100%	98	

Note. Own work.

Results

This section is responsible for presenting the descriptive and inferential results of the research, which can be seen in Table 5. It begins with the results of the sociodemographic variables of the participants who were part of the study. It was found that 56% of the respondents are men and 43% are women. Regarding age, an average of 30 years was obtained, with the youngest person being 18 years old and the oldest being 40 years old. The age range with the highest percentage is from 24 to 29 years, with 46%.

Regarding the quantitative variables, it can be seen that 31% of the respondents worked during their specialization studies, while 69% did not. This contrasts with the results on whether they are currently working, where 78% do and 22% do not.

Tabla 5. Frequency of categorical and quantitative variables

Variable		N	%	Variable		N	%	
Gender	Male	55	56%	Age	18 - 23	4	4%	
	Female	43	43%		24 - 29	45	46%	
Total Age		98	100%		30 - 35	38	39%	
	Minimum		Mean		36 - 41	11	11%	
	18	40	30.1	Total		98	100%	
Variable				N	Yes	%	No	%
Worked during postgraduate studies				98	30	31%	68	69%
Currently employed				98	76	78%	22	22%

Note. Own work.

As regards the results of the preventive dimension, which includes the indicators of trajectory planning and consideration of individual needs and difficulties, the following findings are highlighted in Table 6. The item that obtained the best evaluation was the one related to the information provided to the tutors at the beginning of their studies on the curricular map and the credit system. However, there is a lack of elaboration of a work

program by both the tutor and the student, which adjusts to their needs. In addition, the lack of orientation and guidance of the school trajectory according to the personal and professional interests of the tutor is identified. Consequently, the tutor is not considering the characterization of the student in her school career.

Tabla 6. Descriptives of quantitative variables in the preventive dimension

Ítem	Mean	Standard deviation
At the beginning of your studies, the tutor informed you about the curriculum map and the credit system.	3.40	0.73
At the beginning of your studies, the tutor provided you with information regarding academic mobility.	3.05	0.90
At the beginning of your studies, the tutor provided you with information regarding internships.	3.04	0.95
At the beginning of your studies, the tutor provided you with information regarding participation in academic events.	3.15	0.80
At the beginning of your studies, you developed a work program with your tutor, according to your needs.	2.90	1.00
The tutor supported you in identifying strengths and weaknesses to guide your trajectory based on them.	3.17	0.92
The tutor guided and directed your academic path according to your personal and professional interests.	3.06	0.84
The tutor showed interest in your comprehensive education.	3.19	0.86

Note. Own work.

On the other hand, in relation to the permanence dimension, which is made up of the problem solving and training follow-up indicators, the results are presented in Table 7. In this context, the best evaluated aspects refer to the fact that the tutor demonstrated that he was trained and updated on university regulations, and that the tutor received constant feedback from him in relation to his school career. In contrast, the lowest results were observed in the lack of orientation in personal and family problems, as well as in the lack of adequate referral when the attention had to be specialized. In a similar way to the preventive dimension, there is a lack of attention to situations that are typical of the tutored.

Tabla 7. Descriptives of quantitative variables in the persistence dimension

Ítem	Mean	Standard deviation
During your academic trajectory, the tutor resolved your academic doubts.	3.16	0.83
During your academic trajectory, the tutor resolved your administrative inquiries.	3.16	0.89
During your academic trajectory, the tutor guided you in learning-related problems.	3.13	0.82
During your academic trajectory, the tutor guided you in problems related to your classmates.	3.05	0.93
During your academic trajectory, the tutor guided you in problems related to teachers.	3.04	0.91
During your academic trajectory, the tutor guided you in personal and family issues.	2.87	1.12
During your academic trajectory, the tutor supported you in special situations due to illness or disability.	3.02	1.08
During your academic trajectory, the tutor appropriately referred you when specialized attention was needed.	2.98	0.97
The academic tutor provided support in resolving conflicts that arose during your academic trajectory.	3.01	0.87
The academic tutor demonstrated being qualified and up-to-date in university regulations.	3.38	0.73
The tutor conducted a minimum of three tutoring sessions per semester.	3.20	0.85
The tutor was aware of your grades and earned credits.	3.24	0.80
Throughout your academic trajectory, the tutor demonstrated interest in your learning process and academic performance.	3.14	0.87
You received constant feedback from the tutor regarding your academic trajectory.	3.29	0.80
Throughout your academic trajectory, you maintained constant communication with your tutor regarding academic matters.	3.17	0.86

Note. Own work.

Regarding the graduation dimension, which includes the indicators of academic actions and obtaining the diploma (degree), it is highlighted that the best evaluated aspect was related to the adequate orientation of the tutor regarding the project of linking the tutor. On the other hand, the aspect with the lowest evaluation was related to support in the establishment of strategies aimed at better school achievement. These results can be seen in Table 8.

Tabla 8. Descriptives of quantitative variables in the graduation dimension

Ítem	Mean	Standard deviation
The tutor demonstrated knowledge of the curriculum of the educational program.	3.20	0.85
The tutor supported the establishment of strategies aimed at better academic performance.	3.10	0.89
The tutor promoted the completion of activities that would have an impact on the development of productive or social sectors.	3.17	0.92
The tutor guided you in the outreach project.	3.35	0.73
The tutor provided guidance for a correct progress in the outreach project.	3.28	0.83
The tutor contributed to the timely completion of the outreach project.	3.20	0.90
The tutor guided you in the procedures and processes for the presentation of the project.	3.29	0.76

Note. Own work.

Even though favorable results can be evidenced in general terms regarding the delivery of the tutorials, it is worth noting that the best evaluated dimension was graduation, which includes elements related to the degree project. However, it is advisable to pay attention to the other dimensions so that the tutor feels motivated and can complete their studies in the times established by the regulations, avoiding requesting extensions in their degree process.

On the other hand, the instrument evaluated two dichotomous questions about the perception of the tutors regarding the tutoring they received throughout their school career. In both questions, the results were similar, since practically 8 out of 10 tutors considered that the academic tutoring they received contributed to their graduation and really supported the pursuit of their school career.

Correlation between dimensions

In order to complement the descriptive analyzes of the research, there is a need to evaluate the relationship between continuous variables, which are independent of each other, by calculating their correlation coefficient to determine the trend of the relationship between them (Martínez, Cortés and Perez, 2016). Therefore, a parametric correlation analysis of the dimensions was performed using the Pearson method.

Tabla 9. Correlation between dimensions

		Preventive dimension	Continuation dimension	Graduation dimension
Preventive dimension	Pearson correlation	1	.808**	.753**
	Sig. (two-tailed)		0	0
	N	98	98	98
Continuation dimension	Pearson correlation	.808**	1	.800**
	Sig. (two-tailed)	0		0
	N	98	98	98
Graduation dimension	Pearson correlation	.753**	.800**	1
	Sig. (two-tailed)	0	0	
	N	98	98	98
** The correlation is significant at the 0.01 level (two-tailed).				

Note. Own work.

As can be seen in Table 9, referring to the analysis of the Pearson correlation coefficient, it can be inferred that there is a considerable positive correlation between each of the dimensions. Taking into account the result of bilateral significance, it can be stated with 99% confidence that the correlation is true (Hernández, Fernández, & Baptista, 2014). Therefore, a significant relationship is interpreted between each dimension; in such a way that, if the tutor does not carry out the tutoring correctly, considering the indicators and items as a whole, the school trajectory and the degree process may be affected, with possible drops or, exceeding the limits. times established for the degree.

Relationship Hypothesis Test

In order to verify the research hypothesis, it was submitted to the sample proportion test method, in which an assumption (hypothesis) was affirmed about a population parameter, in other words, the population mean. Thus, we want to verify the statement that at least 70% of the tutors consider that the academic tutoring really supports the monitoring of the school trajectory and that it contributed to their timely discharge from the educational program. When calculating the tutored who consider this statement, an 81% approval is obtained.

The hypothesis is tested that the proportion of students who, when evaluating academic tutorials under a perception criterion, consider them a real support for their trajectory and graduation is at least 70%, using a significance level of 5%.

The previous results obtained from the test for the evaluation sample of the tutorials, result in a mean of 0.81, the standard deviation of 0.397 and the deviation of the average error of 0.040. With these data, we proceed to perform the relationship hypothesis test.

Tabla 10. Test Test for a sample evaluation of tutoring

	Test value = .70					
	t	gl	Sig. (two-tailed)	Mean differenc e	95% Confidence interval for difference	
					Lower	Upper
Test results	2.644	97	.010	.106	.03	.19

Note. Own work.

As can be seen in the results of Table 10, the bilateral significance is equal to .010, this value being less than the alpha value, which is 0.05. Therefore, the null hypothesis is rejected, accepting the research hypothesis and concluding that the proportion of students who consider that academic tutorials have supported their trajectory and graduation is at least 70%, that is, 7 out of 10 tutees consider it so.

Qualitative Aspects of Quantitative Results

Despite the positive perception that most students have regarding the contribution of the tutorial program to their graduation, in relation to the results of the study program, it is observed that 100% of the enrollment completes all the programs that make up the study plan at the established times, but less than 50% obtain their Specialization Diploma in the first three months. Therefore, it is affirmed that academic tutorials favor the follow-up of the school trajectory, but are ineffective in the follow-up of graduation.

Although the tutor shows interest in identifying the strengths and deficiencies of the tutee at the beginning, from the knowledge of these, a joint work program is not developed, aimed at better school achievement and timely graduation.

On the other hand, the low score in the orientation of personal and family problems, as well as in the timely channeling for specialized attention, suggests how the lack of attendance in these indicators directly impacts the graduation of the students. Those students who were not able to complete their graduation process attributed it to family issues and, in

the case of those students whose graduation is out of the established times, it was due to personal issues of a work or health nature.

With this, the importance is reaffirmed not only of establishing a work program according to the personal and professional interests of the tutored, but also of informing the tutors about the services available at the Center for Human and Integral Development of University (CEnDHIU) of the University. Through this center, support is provided to the university community on issues related to health and the family.

In this way, the academic tutor will be able to support the student in problematic situations that arise during their school trajectory, and avoid their graduation outside the average time.

Discussion

According to the results previously exposed, the tutorial system of the educational program does not provide the student with timely guidance for decision-making related to the construction of their school trajectory, according to their expectations, abilities and interests. Despite the fact that, during the tutorial process, students fill out a form signed by the academic tutor, in which they report their academic progress, as well as their participation in complementary activities (UV, s.f. -d), in accordance with the instrument applied, there is no feedback from the tutor that links the personal needs of the student with their academic trajectory.

The above evidences the lack of a work program, as stated in the Regulations of the Institutional Tutoring System (2009) and confirmed by Hernández, Cerón and Ortiz (2020). Said program must be elaborated between the tutor and the mentee, as well as be consistent with the personal and professional interests of the student, and, consequently, allow the student to make timely decisions regarding her school trajectory.

Regarding the tutor's accompaniment, the best evaluated aspects in the applied instrument were the demonstrated capacity of the tutor and its updating in the university regulations. This allows the tutored to receive constant feedback regarding their school trajectory, which corresponds to other research regarding the tutorial system of the Universidad Veracruzana (Capetillo, Tiburcio, Torrescapetillo, & Flores, 2018; Hernández, Cerón, & Ortiz, 2020; Ocampo, Rodríguez and Aguilar, 2021).

On the contrary, the aspect with the lowest score is that referring to guidance in personal and family problems, as well as channeling to specialized media. Despite the fact that the Universidad Veracruzana, through the General Directorate of Academic Development and

Educational Innovation, promotes the strengthening of the comprehensive academic profile (Universidad Veracruzana, 2022), the academic tutoring of the Institutional Tutorial Program (Capetillo, Tiburcio, Torrescapetillo and Flores , 2018; Hernández, Cerón and Ortiz, 2020) and the Specialization, focuses mainly on academic and administrative orientation (UV, s.f. -c; UV, s.f. -d), as happens in other universities (Ángulo and Urbina , 2021), and do not contemplate guidance on personal or family issues.

Therefore, it is possible to affirm that the accompaniment of the tutor does allow the timely identification of situations of academic risk and training needs, but it does not facilitate the correct establishment of strategies that contribute to the school trajectory, by not considering the personal needs of the student. .

As for the last question of the research, on timely graduation and integration into the labor market, one of the best evaluated aspects in the instrument is the adequate orientation by the tutor in the link project, with which the student obtains his diploma. The foregoing is confirmed from the correlation of two elements: the structure of the study plan of the postgraduate program (Universidad Veracruzana [UV], s.f. -c) and the internal monitoring system of the educational program (UV, s.f. -f). . These allow students, when studying each module, to reach a percentage of progress of the project with which they graduate and, in turn, this progress is presented in a report indicating the percentage achieved, a brief explanation of it is offered. , and the observations made on the progress by the director and academic advisor are established.

If the formats of the internal monitoring process of the Specialization (UV, s.f. -f) are analyzed, it is possible to observe that they are specifically oriented to academic monitoring and the administrative process, but not to the establishment of strategies for better school achievement. This corresponds to the results, being one of the aspects with the lowest score. Therefore, this last aspect could be considered as one of the reasons why, although terminal efficiency (UV, s.f. -b) is reached, it is not entirely timely.

Having said the above, it can be affirmed that the tutorial program of the specialization promotes the conclusion of the study plan; however, there is a lack of strategies to achieve it in a timely manner.

Finally, regarding the hypothesis, according to the applied instrument, 8 out of 10 tutors considered that the academic tutoring they received contributed to their graduation and really supported the monitoring of their school trajectory; Therefore, hypothesis 1b, considered null, is verified.

Conclusion

Tutoring emerges as a strategy to reduce dropout rates and terminal efficiency, and consists of a process of accompaniment given by an academic -tutor-, to a student -tutored-, during their school career.

At the Universidad Veracruzana, the Tutorial Process aims to achieve the autonomy and integral formation of the students. At the postgraduate level, not only academic guidance, but also thesis supervision and advisory services are considered as part of this process.

On the other hand, with the purpose of improving the quality of student progression and ensuring their comprehensive development, the study program of the Specialization in Foreign Trade Administration established, parallel to the Institutional Tutorial Process, an internal follow-up. With this, an attempt was made to generate a set of strategies and develop a program of activities between the tutor and the tutee that supports the latter in their professional training, and thereby guarantee the terminal efficiency of the study program.

According to the results obtained in the investigation, the Tutoring Process of the educational program has focused mainly on supporting students to solve academic problems. That is to say, it has been exercised with a more academic and administrative approach than centered on the person; likewise, a program of activities between the tutor and the tutee was not developed.

Even so, the results prove that academic tutoring supports the monitoring of the student's school trajectory and contributes to their graduation, although this has not been opportune in recent generations. In this sense, and with the aim of correcting this last point, it is recommended that the tutor carry out, together with the mentee, a work plan focused on both the personal and professional needs of the mentee. In such a way that it allows establishing concrete actions to be carried out by the tutored during their school career. Finally, the methodological rigidity with which the design and validation of the instrument was carried out emerges as a contribution to the academic community, since it can be adapted to be applied in future research for the diagnosis of academic tutoring programs.

Future lines of research

As future lines of research, it is necessary to consider the perception of teachers regarding tutorial activities, in the sense of how they perceive the participation of students in the tutorial process.

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