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Original article

EN LA CULTURA FÍSICA

Impact of tutorials on the comprehensive training of university students

Impacto de las tutorías en la formación integral de estudiantes universitarios

Impacto dos tutoriais na formação integral dos estudantes universitários



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ABSTRACT

The vertiginous changes produced in society force Higher Education Institutions (HEI) to train citizens with professional and personal skills capable of facing permanent challenges. In this context, the work of the teacher-tutor contributes significantly to this purpose and should be strengthened. For this, a diagnosis is made which objective was to know the state of implementation of the tutoring and its impact on the training of the students. It is started from the bibliographical analysis on the conception and practice of university tutoring to, through a quantitative study, determines the criteria of the students as main actors. The probabilistic sample consisted of 180 students, from a population of 1557, from the Faculty of Education, Human Sciences and Technology of the National University of Chimborazo, to whom a scientifically validated survey was applied, which determined 97% reliability and 95% confidence, which means a high percentage of correspondence between the study variables and the measurement scales. These students receive various subjects, including some related to physical activity and sports. The results obtained were submitted to the multivariate inferential analysis that allowed verifying the tendency of the students with respect to the tutorial activity offered by the Higher Education institution.

Keywords: University tutorials; Tutorial process; Student counseling.

RESUMEN

Los vertiginosos cambios producidos en la sociedad obligan a las instituciones de Educación Superior (IES) a formar ciudadanos con competencias profesionales y personales capaces de enfrentar los permanentes desafíos. En ese contexto, la labor del docente-tutor contribuye significativamente a este propósito y debe fortalecerse. Para ello, se realiza un diagnóstico cuyo objetivo consistió en conocer el estado de implementación de las tutorías y su impacto en la formación de los estudiantes. Se parte del análisis bibliográfico sobre la concepción y la práctica de la tutoría universitaria para, mediante un estudio cuantitativo, determinar el criterio de los educandos como actores principales. La muestra probabilística estuvo conformada por 180 estudiantes, de una población de 1557, de la Facultad de Ciencias de la Educación, Humanas y Tecnologías de la Universidad Nacional de Chimborazo, a quienes se les aplicó una encuesta validada científicamente, que determinó 97 % de fiabilidad y 95 % de confianza, lo que significa un alto porcentaje de correspondencia entre las variables de estudio y las escalas de medición. Estos estudiantes reciben diversas asignaturas, entre ellas algunas relacionadas con la actividad física y el deporte. Los resultados obtenidos se sometieron al análisis inferencial de multivariantes que permitió comprobar la tendencia de los estudiantes con respecto a la actividad tutorial que oferta la institución de Educación Superior.

Palabras clave: Tutorías universitarias; Proceso tutorial; Asesoría estudiantil.

RESUMO

As vertiginosas mudanças na sociedade obrigam as Instituições de Ensino Superior (IES) a formar cidadãos com competências profissionais e pessoais capazes de enfrentar desafios permanentes. Neste contexto, o trabalho do professor-tutor contribui significativamente para este fim e deve ser reforçado. Para o efeito, foi realizado um





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diagnóstico com o objectivo de conhecer o estado de implementação dos tutoriais e o seu impacto na formação dos estudantes. O ponto de partida foi uma análise bibliográfica da concepção e prática da tutoria universitária a fim de determinar, por meio de um estudo quantitativo, os critérios dos estudantes como principais atores. A amostra probabilística consistiu em 180 estudantes, de uma população de 1557, da Faculdade de Ciências da Educação, Humanidades e Tecnologias da Universidade Nacional de Chimborazo, aos quais foi aplicado um inquérito cientificamente validado, que determinou 97% de fiabilidade e 95% de confiança, o que significa uma elevada percentagem de correspondência entre as variáveis de estudo e as escalas de medição. Estes estudantes recebem várias disciplinas, incluindo algumas relacionadas com atividade física e desporto. Os resultados obtidos foram submetidos a análises inferenciais multivariadas, o que nos permitiu verificar a tendência dos estudantes no que diz respeito à atividade tutorial oferecida pela instituição de ensino superior.

Palavras-chave: Aula particular universitária; Processo de tutoria; Aconselhamento ao estudante.

INTRODUCTION

At the level of the globe, there is evidence of a series of transformations that mark the present century, first the evolution, incorporation and access to new information and communication technologies and then the accelerated and exponential growth of knowledge. These are aspects that shape and characterize today's society, turning knowledge and technology into the elements with the greatest impact for the social and economic development of communities (Galán & Lara, 2021).

These transformations require significant changes in the university system, since"education cannot be considered only as a simple process with exclusive incidence in the cognitive area of the students, but must guarantee the development of the entire personality" (González, Blanco, Márquez, & Garcia, 2018).

This statement is correct, since it is important to understand and look at the student as a social actor who is in permanent interrelation and construction of his/her natural, economic, political and cultural environment, who will have to face and be able to overcome different situations, therefore, education becomes a complex multidirectional system that will attend to its students in all areas of personality, providing the essential accompaniment when it comes to overcoming certain barriers or obstacles that arise along the way.

Among the areas of high significance for the integral formation of the university student, is that related to physical activity and sports. It is in this area where the subject acquires competencies and skills that allow him/her to combine intellectual activity with physical activity; through this route, he/she strengthens his/her physical efficiency in order to enhance his/her performance, improve his/her health and increase his/her group, social and community activity (Pina, *et al.*, 1910; Santiago, 2018; Molano, *et al.*, 2019; Santos-Pastor, *et al.*, 2021).

In this context, the concept of tutoring appears mainly in flexible educational models defined as the personalized and committed attention of the tutor in relation to the student, whose function is to orient, guide, inform and train him/her in different aspects and moments of his/her academic career, integrating administrative, academic, psychopedagogical, motivational and personal support functions.







There are important experiences in this regard, in the particular case of English and North American universities that promote individualized education in all university areas, including sports scholarships and their own personalized actions of a particular university nature, (Post, Rosenthal, & Rauh, 2019). The teaching activity is diversified by incorporating tasks such as teaching in front of groups, work with small groups and personalized attention activities specific to each case. In the United States and Canada, as well as in some European countries, centers specifically oriented to meet the academic and personal requirements of students have been created (Rodríguez, 2017).

However, despite Physical Culture and sports being a fundamentally transversal area in almost all higher education centers worldwide, the establishment of specifically sports faculties is only a regulation in some countries. The foregoing does not rule out that, in other mainly technological universities, physical activity and sports are a primary sphere for the training of university students (López, 2018; Bernate, *et al.*, 2019; Aponte, Plata, 2021).

An important case is what happens in Latin America and the Caribbean, related to enrollment where the Higher University Education (ESUP) between 2000 and 2010 increased in student enrollment. These range between 18 and 24 years old, from 21 % to 43 % (average gross enrollment rate), in this way the entry of low- and middle-income students to HEIs substantially increases (Burneo & Godoy, 2020).

However, despite this increase, it is established that only 50 % of entering students obtain their degree between the ages of 25 and 29, while the other half do not achieve it because they abandoned their studies or because they are still studying (Burneo & Godoy, 2020). What precedes generates serious problems both economically and socioemotionally for students (Gabrie, *et al.*, 2017). This affects the evaluation processes of HEIs, by increasing the percentage of repetition and reducing the percentage of graduation.

This reality forced universities to regulate the right of students to receive guidance throughout their training process, in order to contribute to their comprehensive development. Tutoring thus becomes a requirement for the university community, although this is not a guarantee of adequate development (García, 2018; Sánchez-Pato, Pascual, García, Estero, & García-Roca, 2018).

Thus, the actors of the university educational process, teachers-students, play a preponderant role in the development of accompaniment and support activities. The first is the one who has the obligation to enhance their role as leader, companion, guide and advisor. The second must be proactive and offer the teacher the opportunity to accompany him/her in his/her training process and must responsibly join the different activities proposed during his training,

The efficient interrelationship between teacher and student allows HEIs to fulfill their main responsibility, which is the building of a new man with personal, professional and citizen skills, which corresponds to the formation of the individual in three areas:

"Subject and his/her subjectivity in his/her interaction with the family represent the group of peers, his/her own history. The organic subject is developed in its relationship with production, social and political organization, citizenship, construction of the public, quality of life, human development (health, employment, education, practice of physical exercise and sports). Social entrepreneurship is related to its *habitat*, its insertion and connection with







networks, with the global...capabilities and potentialities in its relationship with nature, peace and the community. The intercultural subject immersed in their relations of communication, production and consumption of perceptions, imaginaries, knowledge, identity, transcendence, development of language, thought, socio-cultural interaction, ancestral knowledge and culturality" (Larrea, 2018).

In this sense, it is necessary that university activity involves the person as a whole, so that their journey through the classroom becomes an experience of growth not only intellectual, but also social, personal and moral. This statement gains more strength when they argue "throughout their university career, students must learn to listen, have confidence in themselves, take responsibility for their opinions, make decisions, relate interpersonally, accommodate to change, show autonomy, initiative, work with others, etc." (Gairín, Guillamón, Quinquer, & Feixas, 2004).

In this context, the tutor is the person who exercises the function of guiding, orienting and informing the student in their intellectual, academic, sports and/or professional training; this constitutes a set of activities, attitudes, processes, personal and professional exchanges that characterize the relationship between teachers and students (Ravelo Peña, Bonilla Vichot, Martell Socarras, & Toledo González, 2019).

In this direction, the exercise of some areas of training stands out, such as the practice of physical activity and sports, since it is through them that the university student is able to overcome many challenges that appear in this stage of life. With sport, the student relieves his/her moments of stress, socializes more with the group, learns to make decisions and risks, regulates some of the characteristics associated with his personality, his emotions and to face moments of crisis (Rodríguez-Torrez, 2018; Alzamora, *et al.*, 2022).

The aforementioned shows that the idea of the teacher has been evolving over time due to the paradigm that configures their actions. This is conceived as a professional who, in addition to scientifically mastering a field of knowledge and being able to transmit, he/she, demonstrates research curiosity and methodological rigor. The university student must have a series of personal and human characteristics to help those who are in the process of training.

For this reason, it is up to the organisms that govern higher education and the academic and administrative authorities of HEIs to train university professors in methodologies and strategies that strengthen said capacities and competences to understand their students. This student must be valued from their gender diversity, age, socioeconomic and cultural situation, life experiences, learning styles, emotional maturity. These are elements that determine each one of them as unique and unrepeatable beings, but at the same time they are variables that have a significant impact on their personal and academic life, so they must be treated appropriately and in a timely manner.

On the other hand, it is necessary to generate policies aimed at the creation of physical spaces and adequate distribution of time, since tutoring cannot be restricted to two-hour planning or to the exclusive space of the classroom and the office, it is not about an exclusively academic tutoring, (Miranda, 2018). The problem extends further as it is a constant exercise in the search for the emotional and intellectual maturity of the student, which is defined as career tutoring, for which the best conditions must be guaranteed for teachers to fulfill their function.







The function of the tutor affects the quality of higher education offered by universities and polytechnic schools and, therefore, in the permanence, promotion and qualification of students. In this virtue, it is necessary to define and scope this mission in order to guarantee adequate guidance and support in the personal, administrative, academic and professional spheres to avoid a series of bureaucratic processes that affect the very essence of this responsibility.

As in other regions of the planet, in Ecuador there have been significant transformations in the higher education system in response to local and global needs and scientific, technological and professional trends. In this scenario, the tutorial function is the subject of extensive academic debates that have led to the establishment of laws and regulations with the aim of having the normative support for its application. Namely:

Article 350 of the Constitution of the Republic of Ecuador, which establishes "The Higher Education System, aims at academic and professional training with a scientific and humanistic vision" (Asamblea Nacional del Ecuador, 2008).

Organic Law of Higher Education (Loes), article 5 literal b) and h) establishes respectively: Access to quality and relevant higher education, which allows starting an academic and/or professional career with equal opportunities" and "The right to receive a secular, intercultural, democratic, inclusive and diverse higher education that promotes gender equality, justice and peace (National Assembly of Ecuador, 2008).

Control bodies of HEIs, such as the Council for Evaluation, Accreditation and Quality Assurance of Higher Education (Ceaaces), state in the General Model of Evaluation of the Learning Environment of Careers for Accreditation purposes, in Criterion E of the Tutoring Indicator E1.1, "tutoring is a training activity, which aims to provide guidance and support to students, as relevant elements of university education" (Ceaaces, 2015).

The Council of Higher Education indicates as part of the teaching activities in article 7, numeral 4 of the Regulation of Career and Ranking of the professor and researcher of the higher education system, the "Orientation and accompaniment through face-to-face or virtual, individual tutorials or group" (Higher Education Council, 2019).

The public and private universities of the country, in order to apply the regulations defined by the control organisms, establish a series of strategies, among them:

- Creation of tutorial systems based on the use of institutional platforms in order to guarantee face-to-face and virtual accompaniment to their students.
- Determination of processes aimed at guaranteeing tutorial work.
- Selection of teacher profiles in order to guarantee the quality of the process of accompaniment and support to the student.
- Appointment of resources expressed in time, appointment of teachers, training.
- Organization of extracurricular induction, motivational and training activities in different areas of student interest, among others.
- Dissemination through the institutional communication media of the regulations, planning systems, execution and control of tutorials.
- Periodic evaluations of the academic activities of the teacher-tutor.





- Meetings in student groups where the tutorial processes generated in HEIs are discussed.
- Generation of support and advisory units for students at their different levels of training.

The implemented strategies have allowed to obtain positive experiences in HEIs, however, it is still manifested according to (Cusó & Juárez, 2015) a low commitment of students with tutoring and an infrequent use of it, which reflects ignorance and/or lack of confidence on the part of the students.

In the particular case of the National University of Chimborazo, a public institution located in the center of the Ecuadorian territory, the legal elements that cover the strengthening of the academic offer through tutoring are defined, as well as in Chapter V of the Academic Regime Regulation. of art. 22 to art. 25 systematizes the definition of tutoring, types, modalities and fields of application.

Specifically, the Tutoring Regulations in its chapter I configure tutoring as an educational process that guides, attends and accompanies students in order to strengthen comprehensive training in academic, administrative, professional and personal decision-making; proposes that tutorials contribute to the development of curricular skills that lead to learning achievements; mentions objectives and modalities with which the tutelary action can be put into practice. Chapter II defines the formation of the Tutoring Commissions and their responsibilities. In chapter III, the Tuto -teacher guide of the training process and the functions that he must perform, as well as the rights he has (Unach, 2019) are established.

When analyzing the weaknesses related to the assumption of tutoring jobs for the university student, research works that have contributed to physical activity and sports are also taken into account. This is based on the inclusion of Physical Culture in university life and which has also presented gaps by underestimating very successful experiences that have been validated and established in this regard (Ferriz, *et al.*, 2020; Martínez, *et al.*, 2020).

However, there is awareness that the efforts made to date do not guarantee the full implementation of tutorials and that, on the contrary, a series of difficulties are detected that negatively interfere with the fulfillment of this objective, so it is necessary to identify them. and subsequently take the pertinent measures in order to potentiate the work of the tutor teacher.

Among the most recurrent weaknesses it can be mentioned:

- Difficulty adapting to change.
- Predominance of traditional thinking where the idea persists that the main function of the teacher is to transmit knowledge.
- Resistance to go beyond the role of the teacher who teaches, the teacher who accompanies, guides and guides their students.
- Look at the role of HEIs exclusively based on the scientific and technical training of new professionals.





- Difficulties that arise from the personal characteristics of the tutor teacher, as they do not meet certain conditions and attitudes to learn and/or develop strategies that allow them to carry out their work effectively.
- The diversity of situations that students face *vs* the scenarios in which teachers are prepared.
- Misunderstanding of the specific areas of intervention, which does not guarantee content and meaning to the work of the tutor.
- Tutorial action dissociated from teaching work.
- Criteria totally removed from the reality of assuming that university students do not need help because they are sufficiently mature and autonomous to make decisions at a training, personal and professional level.
- Institutional, organizational and resource difficulties to be overcome, such as the organization of time, teacher training, determination of profiles, among others.
- Formal implementation of tutorial management, which falls on eminently bureaucratic processes that distort its true intentionality, among others.
- The lack of use of recreational, physical and sports activities to counteract the stress resulting from academic overload and the challenges that arise in contemporary university life.

The aforementioned problem arouses the interest of researchers to know the way in which the tutorial process is implemented at the National University of Chimborazo-Faculty of Educational, Human Sciences and Technologies. This has been understood as a set of stages that are articulated in a systemic way to give meaning and coherence to this important function.

At the same time, determine its impact on the university students of this house of higher education, since it is necessary, as in any organization, to assess the current organizational processes in order to propose improvement actions that allow the institutions to be strengthened. That is why the author of this work has the objective of diagnosing the vision, situation and perspective of university students as direct beneficiaries of the aforementioned process.

MATERIALS AND METHODS

This research article arises as part of a quantitative study which objective is to make a proposal aimed at strengthening the academic processes of the National University of Chimborazo, particularly the tutorial process, as it becomes one of the important factors of the university system that impacts significantly in the training of future professionals. In this framework, a descriptive study was carried out, which purpose is to evaluate the tutorial process from the student perspective; the presented results arise from the application of a survey that contains 25 identified study variables, corresponding to the phases of the tutorial process, namely, planning-organization, execution and evaluation.





The data collection instrument was a questionnaire designed with closed questions containing six dichotomous *items* and 19 multiple-choice items; the first ones elaborated with the purpose of knowing the student criterion around elements of planning-organization and the remaining 19 with respect to the phase of execution and evaluation of the impact of the tutorials in the students.

In table 1, the research variables are coded, so that B identifies the planningorganization variables, and V the variables corresponding to the execution and evaluation phases of the tutorial process (Table 1).

CODE	VARIABLES			
B1	Knowledge of the rules and regulations that regulate the tutorial work			
B2	Knowledge about the existence of instruments for the planning, monitorin and evaluation of tutorials			
B3	Semester planning of tutorials is carried out in coordination with tutor career director			
B4	Pertinence of the allocation of time for the tutorial work			
B5	Pertinence of the criterion to determine the teacher tutor			
B6	Permanence of the appointed tutor throughout the career			
V1	Interest in planned activities			
V2	Support of tutorials in student training			
V3	Relevance of the tutoring schedule for student attention			
V4	Participation of students in tutorial activities			
V5	Information on services provided by the Department of Student an University Welfare-DEBEYU			
V6	Training and updating of teachers to fulfill their tutorial work			
V7	Tutoring in attention to study habits, recreational, physical and sport activities, fields of interest or personal situations			
V8	Participation in academic, cultural, sports or recreational activities that allow university empowerment			
V9	Information on procedures to follow in case of pedagogical difficulties			
V10	Information on procedures to follow in case of difficulties of a personal o family nature			
V11	Information on the procedure to follow for scholarships for socio-economi situations			
V12	Effectiveness of virtual tutorials			
V13	Compliance with planned activities (tutoring) during the academic period			
V14	Meetings promoted at the level of teachers to solve problems detected i the students.			
V15	Accompaniment and monitoring of students who present difficulties or require support			
V16	Changes in student behavior thanks to tutoring			
V17	Analysis of student performance before and during tutorials			
V18	Contributes to the quality of student performance			
V19	Difficulties detected and reported by the tutor to the correspondin instances (medical center, student welfare department, Faculty Secretarie or others)			

Table 1. - Code and Variables corresponding to the tutorial process

Source: Survey of students of the Faculty of Education, Human Sciences and Technology-UNACH





The instrument described was subjected to evaluation by experts and its prior application through a pilot test carried out on 20 individuals chosen at random from the total population to be studied. A rigorous procedure was applied that scientifically allowed to meet the criteria of validity and reliability of the instrument, considering two criteria: variables of planning-organization (B) and variables of execution and evaluation of the impact of the tutorials (V).

Using Cronbach's alpha, the level of reliability of the questionnaire was determined, resulting in 97 % reliability of the tool.

In order to determine the affinity between variables of study and the measurement scales, a correspondence analysis was carried out using the *chi* -square test, with which the following was obtained:

- For the "B" variables, the value of the X- squared statistic = 47.9, degrees of freedom = 5 and a p-value less than 1 %; and,
- For the "V" variables, the value of the X squared statistic =102.9, degrees of freedom= 54 and a p-value less than 1 %;

Therefore, the analysis carried out using the *chi*-square test showed that in the applied instrument there is dependence or affinity between the study variables and the measurement scales with 95 % confidence, which gives it a high percentage of correspondence.

Subsequently, the sample size of a population equal to 1,557 students enrolled in the period May 2021-October 2021 in the nine undergraduate courses offered by the Faculty of Education, Human Sciences and Technologies of the National University of Chimborazo was defined. (Pedagogy of Physical Activity and Sports, Pedagogy of Experimental Computer Sciences, Pedagogy of Experimental Sciences Chemistry and Biology, Pedagogy of History and Social Sciences and Basic Education), made up of 583 men and 974 women (Unach 2018), with a margin of error of 7 %, for which the following formula was applied for finite populations (Equation 1).

$$n = \frac{N}{(N-1)E^2 + 1} \ (1)$$

The probabilistic sample consisted of 180 students, to whom the questionnaire was applied in digital format, through the use of Google Drive Form, which allowed obtaining the answers online. With the results obtained, it was proceeded to the tabulation and descriptive analysis to then perform the statistical analysis of multivariate correspondences. In that order, the trend of the students was determined when evaluating the tutoring process provided in the higher education institution. For this procedure, the tools of the statistical software R, version 3.4.2, were used, which is a free scientific software that allows the classification of the variables based on the trend with respect to the responses of the students.

The results are presented in tables and diagrams to more clearly visualize the trend of those investigated.





RESULTS AND DISCUSSION

Table 2 allows knowing the frequency with which the students responded to the different study variables, being 1 never, 2 sometimes, 3 frequently and 4 always (Table 2).

VARIABLES	1	2	3	4
V1	16	55	66	43
V2	16	43	61	60
V3		51	56	fifty
V4	14	58	52	53
V5	37	43	61	39
V6	11	29	56	84
V7	17	55	57	51
V8	26	51	59	44
V9	25	53	64	38
V10	32	51	53	44
V11	30	50	61	39
V12	25	53	61	41
V13	24	50	62	44
V14	32	48	62	38
V15	21	58	61	40
V16	30	51	62	37
V17	24	50	65	41
V18	25	49	58	48
V19	33	50	60	37

Table 2.- Tabulation of variable results (V)

Source: Survey applied to students of the Faculty of Education, Human Sciences and Technologies of the UNACH.

In figure 1, it is determined that there is a greater correlation with criteria two that correspond to the alternative sometimes and three frequently, which means that from the descriptive analysis it can be evidenced that the tutorial work is not implemented constantly in the National University of Chimborazo -Faculty of Educational, Human and Technological Sciences and, therefore, their contribution to students is not appreciated either (Figure 1).





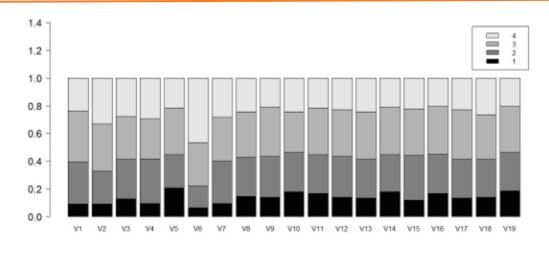
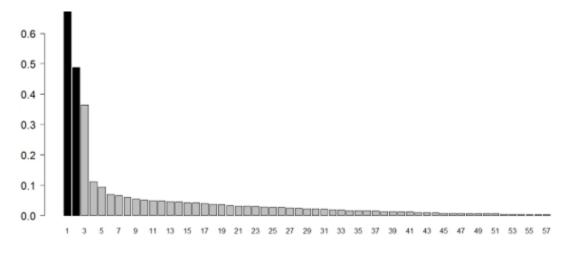
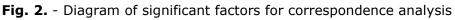


Fig 1. - Bar chart of the variables (V)

In figure 2, it is observed that to carry out the statistical analysis of correspondences, two significant factors were identified that determine a 94.75 % explanation of the variability of the results of the survey carried out, with factor 1 being the one with the highest percentage of explanation. with 75.3 %, followed by factor 2 with 19.4 %. This means that, based on the indicated factors (1 and 2), it is possible to determine the trend with respect to the responses obtained (Figure 2).





In figure 3, the results shown in figure 1 are confirmed, by means of an inferential statistical analysis of correspondences, based on what is projected in the two factors. This summarizes the projection of the frequencies obtained in the tabulation of the survey, where it is observed that criterion 2 (sometimes), located on the horizontal axis, predominates over criterion 3 (frequently), located on the vertical axis, while the criteria 1 never and 4 always turn out to be linear combinations of these two factors (Figure 3).





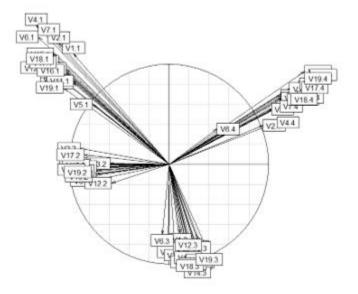


Fig. 3. - Statistical analysis of correspondences of the projected tabulated data in two factors: horizontal and vertical

Table 3 allows knowing the frequency with which the students responded to the different study variables corresponding to the planning-organization of the tutorials (Table 3).

VARIABLES	YES	NOT
B1	99	81
B2	107	73
B3	132	48
B4	139	41
B5	151	29
B6	162	18

Table 3.- Tabulation of the results of the variables (B)

Source: Survey applied to the students of the Faculty of Education, Human Sciences and Technologies of the UNACH

Figure 4 shows that there is a marked YES trend, especially in variables B4, B5, and B6 from the descriptive analysis (Figure 4).





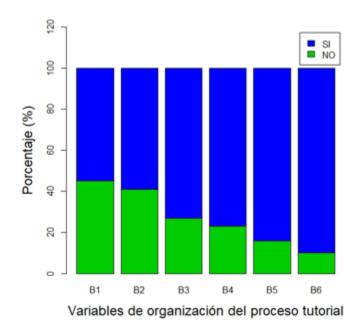


Fig. 4. - Bar chart of the organization of the tutorial process

Figure 5 shows that there is a good classification of the YES option, with respect to the NO option, taking into account the vertical factor; while in the NO option there is also a subclassification in two groups with respect to the horizontal factor; this means that the applied instrument is well designed (Figure 5).

The inferential statistical analysis of correspondence indicates that the trend of the results obtained in the survey is oriented towards the YES option.

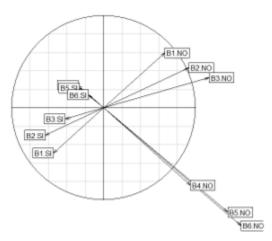


Fig. 5. - Statistical analysis of correspondences of the projected tabulated data in two factors: horizontal and vertical





1. On the planning and organization phase of the tutorials

The results obtained determined that in the planning and organization phase of the tutorial process there is a marked tendency towards YES on the part of the population studied, which means that the students of the Faculty of Education, Human Sciences and Technologies of the University National Institute of Chimborazo know the institutional regulations aimed at regulating the aforementioned process in the different faculties and careers, as well as the physical and technological instruments for the planning, monitoring and evaluation of tutorial management.

The trend is maintained in relation to the way in which this work is planned and the relevance in terms of assigning the workload and the teacher-tutor, which according to the students is adequate.

It is important to indicate that the target population considers it correct that the teachertutor be appointed to a group of students until the end of their studies, in order to strengthen the teacher-student relationship and contribute significantly to the comprehensive training of the student.

This comprehensive training, among other aspects, is aimed at promoting physical activity and sports to reduce stress levels, promote teamwork and encourage the healthy use of free time.

2. About the execution phase of the tutorials

With respect to the phase of execution or implementation of the tutorial work determined through the interest in the planned activities, effective fulfillment of the same, relevance of the schedule. Activities such as: participation of students in sports tournaments, knowledge of the teacher to manage academic activities correctly, advice on the services provided by DEBEYU, advice on procedures to follow in case of pedagogical-family or socioeconomic difficulties are also contemplated. The response trend of the students of the Faculty of Education, Human Sciences and Technology is option 2 (sometimes) and 3 (frequently). The predominant one is the answer (sometimes), which shows that there is no effective implementation of the tutorial task when it is executed sporadically.

3. On the assessment phase of the impact of the tutorials

When referring to the impact of tutorials on students, where variables such as the support and accompaniment provided by the teacher-tutor are considered, the following are listed:

- Impact on academic performance.
- Behavior, development of study habits, fields of interest.
- Attention to personal situations.
- Addressing the corresponding instances in the event of difficulties detected.
- Incorporation of students in cultural-sports activities that strengthen their sense of belonging to the institution.





In this analysis, the tendency of students to choose (sometimes) was confirmed, which is understandable, because if the implementation of tutorials is not effective, it will not be able to guarantee a permanent and sustained impact on students.

CONCLUSIONS

Due to the scientific rigor with which the data collection instrument was developed and evaluated, it meets the parameters of reliability and confidence through statistical techniques of multivariate correspondence analysis. This turns the process into an instrument model that can be used by other HEIs interested in monitoring and evaluating tutorial management, which constitutes a contribution for future research.

When analyzing the results obtained through the inferential statistical analysis of correspondences of the variables of planning and organization of the tutorial process, it is shown that the tendency of the students of the Faculty of Human Education Sciences and Technologies is oriented to the option (YES), which means that the higher education institution meets the expectations of the students in this area.

Similarly, through inferential correspondence analysis of the tutorial implementation variables and evaluation of their impact on students, a marked tendency to the alternative (sometimes) was identified. This situation means that, in the opinion of the students of the Faculty of Education, Human Sciences and Technology, there are weaknesses in tutorial management.

The trends expressed by the students of the Faculty of Education, Human Sciences and Technologies show that the tutorial process in the aforementioned academic unit is formally implemented, but in practice it presents serious limitations, including some weaknesses in practice of physical activity and sport among other topics. This scenario has not enabled adequate achievement and, therefore, does not reflect a positive impact on the personal or professional growth of students, which affects the quality of the training offered.

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