

Evaluation of student perception of the social climate at the Universidad Tecnológica Fidel Velazquez and its relationship with the dropout rate by academic division

Evaluación de la percepción estudiantil del clima social en la Universidad Tecnológica Fidel Velazquez y su relación con el índice de bajas por división

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Abstract

This work is part of an investigation line in the UTFV, about the design and application of student retention strategies. This study took place in two stages, in the first stage, through a sample of 58 students that withdraw in the quarter 2013-3 where some causes were identified as the academic division in which they were registered. In the second stage the social environment was measured through the instrument CES (social environment scale for school centers). The results indicate that to better social climate perception, they appear a minor number of students withdraw in the academic division. This affirmation derives from the obtained results, because the accounting division has the best social climate perception, coincidentally is the academic division with smaller number of students withdraw displayed in the sample of the 1st stage, and in the Kruskal test - Wallis obtains a 0,001 coefficient what demonstrates the relation. Whereas the academic division with worse social climate perception is TIC's and the displayed number of students withdraw is 22, within the sample of the 1st stage, it shows an inverse relation to worse social climate, greater number of losses.

Social climate, losses, retention strategies

Resumen

Este trabajo, forma parte de una línea de investigación de la UTFV, sobre el diseño y aplicación de Estrategias de retención de alumnos. Este estudio se realizó en dos fases, en la fase A, a través de una muestra de 58 alumnos que tramitaron la baja en el cuatrimestre 2013-3 donde se identificaron las causas y división académica donde estaban matriculados. La fase B consistió en la evaluación del clima social a través del instrumento CES (escala de clima social para centro escolar). Los resultados indican que, a mejor percepción de clima social, se presentan menor número de bajas en la división académica. Esta afirmación deriva de los resultados obtenidos, pues la división de contabilidad tiene la mejor percepción de clima social, coincidentemente es la división académica con menor número de bajas presentadas en la muestra de la fase A, y en la prueba Kruskal - Wallis obtiene un coeficiente de 0.001 lo que demuestra la relación. Mientras que la división académica con peor percepción de clima social es TIC's y el número de bajas presentadas es de 22, dentro de la muestra de la fase A, muestra una relación inversa, es decir a peor percepción de clima social, mayor número de bajas.

Clima social, Bajas académicas, Estrategias de retención

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Introduction

School retention is understood as the capacity of the educational system to achieve the permanence of students in the classrooms, guaranteeing the completion of cycles and levels in the anticipated times and ensuring mastery of the corresponding skills and knowledge. Therefore, the inclusion and permanence of adolescents and young people in school is a challenge for educational systems, but it is undoubtedly the degree of complexity that it implies between the certainties and uncertainties that exist in this regard (OEA, 2003). It is therefore an issue of interest to governments that, knowing the economic, political and social conditions of their regions, recognize the preponderant role of education in the development of a country, due to the quality of human capital that is incorporated into the productive sector, trained in educational institutions.

In the educational system, regardless of the public or private condition, efforts are made to generate retention strategies that mostly arise from the reflections that they generate about their problems and that respond to their contextual needs; Hence, through the Directorate of Academic Development and Strengthening, the UTFV established a line of research to design retention strategies and to this end, begin by knowing the problems of the student population; so that when these are put into practice, they are successful and result in the permanence of students in the classrooms and collaterally in the quality of education, since institutions can attract a larger budget and even enjoy social prestige.

Retention strategies

Access to the University is only the beginning to meet the demand for educational spaces, subsequently evaluating and designing strategies to keep students from the first year to the second year of school.

For the UTFV it is essential to be able to approach this issue from all its edges in order to conceive the phenomenon in the richness and complexity that they pose. one of them. Saweczko, AM (2008) who, through a study on the different perspectives that exist between student persistence and institutional retention in education, found that these terms are frequently used interchangeably, only a few studies (Astin, 1975; Bean, 1980; Hagedorn, 2005; Tinto, 1993) clearly define these two concepts. Specifically, the conceptual difference between the two terms is that persistence refers to a student's ability to achieve their own academic goals and retention refers to the institution's ability to maintain students from one year to the next (Astin, 1975 and Hagedorn, 2005).

Hagedorn (2005) identifies four types of retention: a) Institutional Retention: Refers to the proportion of students who continue to be enrolled in the same institution from year to year. b) System retention: This focuses on the student and uses persistence as a measure of retention. Therefore, it considers students who leave one institution and enroll in another, that is, it takes into account the student's transfers until they obtain their degree.

c) Retention within a specialty or discipline: Refers to the retention of students within a main area of study, discipline, or specific department. It should be noted that in this case, a specific area may not retain a student who decides to change to another program of the same institution, however, the institution does manage to retain it. d) Retention within a course: It is the smallest unit of analysis of retention, since it refers to the completion of a certain course by a student. This analysis allows determining the courses that a student has not completed, despite the fact that the institution managed to retain it.

After a period of observing the movements that Tinto (1993) calls "stop-outs", which are students who voluntarily withdraw for a period of time, and then return at a later date to continue their studies, the interest in know the characteristics of the student population.

Social climate

The term social climate refers to the perception that individuals have of the different aspects of the environment in which their habitual activities take place, for example: the school, which for the purposes of this research is the only social system to be addressed. So, the social climate is the positive or negative feeling that a person has from their experiences in the school system. The evaluation of the social climate includes the perception that individuals who are part of the school system have about the norms, beliefs and relationships that characterize that school context (Arón and Milicic, 1999).

The factors that are related to a positive social climate are: an appropriate physical environment, varied and entertaining activities, respectful communication between teachers and students, and between peers, ability to listen to each other, ability to value each other. It is also one in which people are sensitive to difficult situations that others may be going through, and they are capable of giving emotional support.

The positive social climate is usually associated with the emotional intelligence that group members have to resolve their conflicts in non-violent ways.

In addition to the general social climate perceived in an institution, there are microclimates within the school context that sometimes act as protectors against the broader social climate. For example, in a context of school management perceived as very authoritarian, some students may group together and generate a different climate in their group, which is generally perceived as better or at least different, which allows them to mitigate or cushion the adverse effect it has on them. the management modality.

The organizational social climate is a relatively new concept in the field of educational and organizational psychology, and its definition or its use often varies depending on the researchers who study it.

The behavior of an individual in the center where they work (work or study) must be considered according to Lewin's formula¹ which stipulates that behavior is a function of the person involved and their environment

$$C = f(P \times E)$$

Any situation that involves a meeting of people (social situation) combines specific factors of the individual, such as aptitudes and physical and psychological characteristics and, in return, this presents social and physical environments that have their own particularities.

The individual then appears as immersed within a climate determined by the particular nature of the organization.

Thus, the prediction of behavior depends in part on the situation.

Which confirms that the way an individual behaves in the social environment not only depends on his personal characteristics but also on the way he perceives his social climate and the components of his organization. For example, if a student sees the climate of his school as a threatening thing, he will adopt defense behaviors to try to remove that tension.

The social climate is very important in the development of a school organization, in its evolution and its adaptation to the external environment. A too rigid climate, a poorly defined and non-evolutionary organizational structure will cause an uncontrollable decline phase to enter.

For this reason, the study of the components and the variations of the internal environment, coming from the properties of the schools themselves and what are the factors within the climate that most influence the students and how it is related to the teaching-learning process.

Based on this knowledge, the directive and administrative structure will then be able to plan interventions to modify the behavior of those involved in that social context and collaterally the climate of their organization that would result in: an improvement in productivity, greater achievement in the student, maximize the teaching-learning process and promote interpersonal relationships. The study of the climate of a school center is a task that can be carried out in spite of everything, without too many difficulties since there are sources of information such as reports, statistics, as well as the perception of each of the members of the school (students, teachers, managers, etc.)

Table 1 presents the characteristics of the social climate concept. The organizational-school climate; constitutes a configuration of the personal characteristics of an individual can constitute her personality. It is obvious that the social climate in the school influences the behavior of an individual towards their learning process, just as the atmospheric climate can play a certain role in their behavior. The social climate is a multidimensional component of elements like the atmospheric climate. In fact, the latter can be decomposed in terms of humidity, atmospheric pressure, gaseous components (oxygen, nitrogen), pollution, etc. In the same way, the social climate within a school can also be decomposed in terms of organizational structures, number of students, modes of communication and interaction, leadership style of the management, etc.

Climate is a synthetic and molecular concept like personality. Climate is a particular configuration of situational variables. Climate has a connotation of continuity but not as permanent as culture, therefore it can change after a particular intervention. The climate is determined for the most part by the characteristics, behaviors, skills, expectations of other people, by sociological and cultural realities. The climate is phenomenologically external to the individual who, on the contrary, can feel like an agent that contributes to his nature. The climate is phenomenologically different from the task, in such a way that different climates can be observed in the individuals who carry out the same task. Climate is based on the characteristics of external reality as perceived by the observer or the actor (perception is not always conscious). It can be difficult to describe in words, although its results are easily identifiable.

Table 1 Characteristics of the concept of organizational climate – school

All these elements add up to form a particular social climate, endowed with its own characteristics that represents, in a certain way, the personality of a school such as the UTFV influences the behavior of the people participating in it.

However, for the exploratory purposes of this study, the social climate in the UTFV will be evaluated from the perception of the students of each academic division to later correlate them with the number of withdrawals registered by each academic division.

Method

Subjects

For phase A, 56 cases of students who processed their withdrawal in the 2013-3 semester participated, which were obtained through quota sampling. For phase B, a probabilistic sample of 386 students enrolled in the UTFV during the 2014-2 semester was considered through the simple method stratified by academic division, with a standard error of 0.0015 and $p(1-p)$.

Apparatus and materials

Computer

SPSS Software (Statistical Package for Social Science) for Windows V.22 in Spanish

Instruments

Social Climate Scale, CES version for Moss Schools

- Original name: «the social climate scales: family, work, correctional institutions and classroom environment scales».
- Authors: R.H. Moos, B.S. Moos, and E.J. Trickett.
- Spanish adaptation: TEA Ediciones.
- Administration: individual and collective.
- Duration: Variable, twenty minutes for each stopover, approx.
- Application: teenagers and adults.
- Significance: these are four independent scales that assess socio-environmental characteristics and personal relationships in family, work and schools.
- Typification: scales for each of the scales made with Spanish samples.

Questionnaire for the investigation of causes of leave built expressly for it.

Variables

Social climate.- defined as the relationships that exist between students, students and teachers and the teaching-learning process, through four subscales:

1. **RELATIONSHIPS** describes the interaction between the actors in a school center and that contemplates the dimension: Involvement, Affiliation and Help.
2. **SELF-REALIZATION**, describes the satisfaction obtained by a student from the educational process and which includes the dimension: Tasks, Competitiveness
3. **STABILITY** describes the continuity that exists in terms of rules and regulations of interaction and that contemplates the dimension: Organization, Clarity and Control.
4. **CHANGE** describes the possibility of change contemplated by a system, which contemplates the dimension: Innovation.

Withdrawal from school.- procedure by which you request to leave your university studies temporarily (up to one year) permanently.

Design

A descriptive and exploratory, quasi-experimental investigation was carried out.

Procedure**Phase A**

Students who carry out their withdrawal procedure must obtain a no-debit stamp in the Department of Student Services, there a questionnaire was applied, where they had to provide data related to two areas: academic trajectory and the reason for requesting their withdrawal, specifying in great detail the situations and conditions that led to the application, as well as the type of withdrawal that they were processing.

Subsequently, 56 questionnaires were randomly chosen to explore the types of withdrawal, reasons that led them to process them and interventions (if it was the case) that the academic divisions or departments of the UTFV had carried out as a strategy for student retention.

Phase b

A probabilistic sample was determined based on the total number of students enrolled in the UTFV during the 2014-2 semester, by the simple method stratified by academic divisions. Afterwards, the classrooms of each academic division were attended, where students take classes and groups were randomly chosen to which the Social Climate Scale, CES version (for schools) was applied until the number of students determined in each was completed. extract in the sample calculation.

Already in the classroom, the applicators informed them about the anonymity of the results and each student was given a sheet with the reagents and an answer sheet, they were asked to answer honestly, thinking about the way in which they are regularly relate in their classes.

The scale does not include a time limit for execution, however, it usually took 30 minutes to apply the survey in each group.

Once the data were collected, the scales were graded according to the correction protocol of said test, then the percentiles recorded by the sample by academic division were quantitatively analyzed.

Results**Phase A**

56 cases of students who dropped out in the 2013-3 period were evaluated, of which 38 were men (67.9%) and 18 women (32.1%), with a mean age of 20.3 years. According to the type of withdrawal they presented, it was; temporary with 23 cases (41.1%) and definitive with 33 cases (58.9%), of the reported cases 12.5% were re-enrolled in some other study plan offered by the UTFV

According to the academic division in which they were enrolled at the time of withdrawal, the following information was found: in the academic division of TICS with 19 cases (33.9%); Administration with 14 cases (25%); Environmental technology with 7 cases (12.5%); Maintenance with 7 cases (12.5%); Graphic arts with 5 cases (8.9%); Accounting with 4 cases (7.1%).

According to the semester they were studying, when they requested the withdrawal: first semester with 22 cases (39.3%); second semester with 8 cases (14.3%); third quarter with 9 cases (16.1%) and fifth quarter with 9 cases (16.1%).

Regarding academic performance prior to discharge.

The number of special exams presented during their career at the UTFV was evaluated. 38 cases (67.9%) never presented a special exam; 14 had a special exam (25%); 3 cases (5.4%) presented more than two special examinations.

The average reported for the four-month period immediately prior to the one requesting the discharge was 8.0 in 16 cases (28.6%); 9.0 with 9 cases (16.1%) and 7.0 with 5 cases (8.9%), which places 44.7% of the sample in a passing grade, before the withdrawal request.

Finally, the causes for which they processed the withdrawal were the following: Personal problems (33.9%), Financial problems (17.9%), Academic performance (16.1%), Incompatibility with my interests (16.1%), Administrative procedure (12.5%), Poor quality of information (3.6%).

Regarding the possible retention strategies developed by the institution, the following was observed: in academic tutoring, 58.9% did not inform their tutor about their intention to unsubscribe, this, because they did not know their tutor, was not his teacher for which he had no contact with him or did not consider that he should speak with him.

Regarding the director's actions, 32.1% did not speak with the director regarding his intention to unsubscribe, only to have him sign his paperwork.

Phase B

The measurement of the social climate was carried out through the SOCIAL CLIMATE SCALE version (CES) of Moss; It consists of 90 items that describe the teaching process and the student-teacher and teacher-student relationships and their organizational class structure.

386 students who were surveyed participated in this phase, of which 198 are male, 178 female and 8 answer sheets that did not have this data. The average age of the surveyed students was 21.5 years. By the academic division in which they are enrolled: administration 18%, ICT 17%, environmental technology 18%, Graphic arts 13.7% and Accounting 22.1%

After rating the social climate scales, the percentiles that describe the following dimensions of the process were obtained:

Involvement describes the degree to which students show interest in class activities and participate during class and in complementary activities such as homework.

In Table 1, it is observed that the academic divisions of administration, accounting and environmental technology are those that present the highest percentiles dimension, while industrial maintenance is the academic division with the lowest score on the scale.

Affiliation, this dimension measures the level of friendship between students and how they help each other, in their tasks, know each other and enjoy working together.

Table 2 shows that the highest percentiles in this subscale are located in the academic divisions of accounting and environmental technology, while ICT is the division with the worst perception of affiliation among students.

Help, is the dimension that measures the degree of concern and friendship of the teacher to his students, which includes open communication with schoolchildren, trust and interest in their ideas

Table 3 shows that Accounting is the academic division with the best percentile in the aid dimension, while ICT, Environmental Technology and Industrial Maintenance have the worst indices in this subscale.

Tasks, this dimension assesses the importance given to the completion of scheduled tasks, the emphasis placed by the teacher on the subject's syllabus, as well as the self-realization that the student has based on the value and importance that he gives to these

Table 4 shows the percentiles of the tasks dimension; it is the academic divisions of administration and accounting that have the highest level in this dimension, while maintenance is the division that registers the lowest score.

Competitiveness, this dimension describes the degree of importance given to the effort to achieve a good rating and esteem, as well as the difficulty in obtaining them

Table 5, which shows the percentiles of the competitiveness dimension, shows that it is in the accounting academic division where students perceive themselves to be more competitive, thus observing that the least competitive divisions are ICTs and Maintenance.

Organization is a dimension that refers to the importance given to order, organization and good manners in school assignments.

The dimension, clarity, is the importance given to the establishment and monitoring of clear rules and to the knowledge by the students of the consequences of their non-compliance. Degree to which the teacher is consistent with these regulations and non-compliance.

The subscale, control; It is the degree to which the teacher is strict in his controls on compliance with the rules and in penalizing offenders, he also considers the complexity of the rules and the difficulty in following them.

The fourth dimension, the change that assesses the degree to which there is diversity, novelty, and reasonable variation in class activities.

The innovation subscale is the degree to which students contribute to planning school activities and the variety and changes that the teacher introduces with new techniques and stimuli to student creativity.

Finally, a kruskal-Wallis test was applied to correlate the number of withdrawals by academic division and the statistical mean of the percentile obtained in the measurement of social climate, yielding a coefficient between .001 and .009 for all dimensions, which indicates that there is a significant relationship between the social climate of the academic division and the number of casualties registered; except competitiveness, where the coefficient was .377, which shows in this dimension of the social climate there is no association with respect to the number of casualties registered by academic division.

Conclusions

The results show that if there are significant differences, between the frequencies of the percentiles of the measurement of social climate in the six academic divisions that the UTFV has, we observe that in general it is the academic accounting division, which groups the marketing careers, accounting and financial and fiscal engineering, which stands out for having a social climate that we could qualify as desirable or adequate and the Kruskal - Wallis correlation coefficient is 0.001.

This indicates that there is a significant relationship with respect to the number of casualties, which according to the sample from phase A, is 4.

It is well known that the ICT academic division is the academic division with the worst social climate in the UTFV and it obtains a correlation coefficient of 0.003, which indicates that there is a relationship between it and the number of casualties, since they have 22.

This allows us to show that the better the perception of the social climate, the lower the number of casualties promoted.

What allows us to better know the student population, as well as the future development and application of actions aimed at the retention of students in this house of studies.

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