# Volume 6, Issue 10 — January — June — 2020

E

0

R

ŀ

A

N

# Journal-Republic of Peru

ISSN-On line: 2414-4819

**ECORFAN®** 

# ECORFAN- Journal Republico of Perú

**Chief Editor** 

SUYO-CRUZ, Gabriel. PhD

**Executive Director** 

RAMOS-ESCAMILLA, María. PhD

**Editorial Director** 

PERALTA-CASTRO, Enrique. MsC

Web Designer

ESCAMILLA-BOUCHAN, Imelda. PhD

Web Diagrammer

LUNA-SOTO, Vladimir. PhD

**Editorial Assistant** 

REYES-VILLAO, Angélica. BsC

**Translator** 

DÍAZ-OCAMPO, Javier, BsC

**Philologist** 

RAMOS-ARANCIBIA, Alejandra. BsC

ECORFAN Journal-Republic of Peru,

Volume 6, Issue 10, January – June, 2020, is a journal edited semestral by ECORFAN. La Raza Av. 1047 No.-Santa Ana, Cusco, Peru. Postcode: 11500.

www.ecorfan.org/republicofperu/,

journal@ecorfan.org. Editor in Chief: SUYO-CRUZ, Gabriel. PhD. ISSN-2414-4819. Responsible for the latest update of this number ECORFAN Computer Unit. ESCAMILLA-BOUCHÁN, Imelda, LUNA-SOTO, Vladimir. La Raza Av. 1047 No. - Santa Ana, Cusco-Peru. Postcode: 11500 last updated June 30, 2020.

The opinions expressed by the authors do not necessarily reflect the views of the editor of the publication.

It is strictly forbidden to reproduce any part of the contents and images of the publication without permission of the National Institute for the Defense of Competition and Protection of Intellectual Property.

# **ECORFAN Journal Republic of Peru**

# **Definition of Journal**

# **Scientific Objectives**

Support the international scientific community in its written production Science, Technology and Innovation in the Field of Social Sciences, in Subdisciplines of business, administration-administrative, management-SME, management-tourism, hotel, management-financial, administration.

ECORFAN-Mexico SC is a Scientific and Technological Company in contribution to the Human Resource training focused on the continuity in the critical analysis of International Research and is attached to CONACYT-RENIECYT number 1702902, its commitment is to disseminate research and contributions of the International Scientific Community, academic institutions, agencies and entities of the public and private sectors and contribute to the linking of researchers who carry out scientific activities, technological developments and training of specialized human resources with governments, companies and social organizations.

Encourage the interlocution of the International Scientific Community with other Study Centers in Mexico and abroad and promote a wide incorporation of academics, specialists and researchers to the publication in Science Structures of Autonomous Universities - State Public Universities - Federal IES - Polytechnic Universities - Technological Universities - Federal Technological Institutes - Normal Schools - Decentralized Technological Institutes - Intercultural Universities - S & T Councils - CONACYT Research Centers.

# Scope, Coverage and Audience

ECORFAN Journal Republic of Peru is a Journal edited by ECORFAN-Mexico S.C in its Holding with repository in Republic of Peru, is a scientific publication arbitrated and indexed with semester periods. It supports a wide range of contents that are evaluated by academic peers by the Double-Blind method, around subjects related to the theory and practice of Business, administration-administrative, management-SME, management-tourism, hotel, management-Financial, Administration with diverse approaches and perspectives, That contribute to the diffusion of the development of Science Technology and Innovation that allow the arguments related to the decision making and influence in the formulation of international policies in the Field of Social Sciences. The editorial horizon of ECORFAN-Mexico® extends beyond the academy and integrates other segments of research and analysis outside the scope, as long as they meet the requirements of rigorous argumentative and scientific, as well as addressing issues of general and current interest of the International Scientific Society.

# **Editorial Board**

BARRERO-ROSALES, José Luis. PhD Universidad Rey Juan Carlos III

MIRANDA - GARCÍA, Marta. PhD Universidad Complutense de Madrid

BARDEY, David. PhD University of Besançon

SEGOVIA - VARGAS, María Jesús. PhD Universidad Complutense de Madrid

MIRANDA - TORRADO, Fernando. PhD Universidad de Santiago de Compostela

GARCIA - ESPINOZA, Lupe Cecilia. PhD Universidad de Santiago de Compostela

ÁLVAREZ - ECHEVERRIA, Francisco Antonio. PhD University José Matías Delgado

DANTE - SUAREZ, Eugenio. PhD Arizona State University

GÓMEZ - MONGE, Rodrigo. PhD Universidad de Santiago de Compostela

D. EVANS, Richard. PhD University of Greenwich

# **Arbitration Committee**

CONTRERAS - ÁLVAREZ, Isaí. PhD Universidad Autónoma Metropolitana

GAVIRA - DURÓN, Nora. PhD Instituto Politécnico Nacional

GONZALEZ - IBARRA, Miguel Rodrigo. PhD Universidad Nacional Autónoma de México

FORNÉS - RIVERA, René Daniel. PhD Instituto Tecnológico de Sonora

MALDONADO, María Magdalena. PhD Instituto Politécnico Nacional

CASTILLO - DIEGO, Teresa Ivonne. PhD Universidad Autónoma de Tlaxcala

HERNÁNDEZ, Carmen Guadalupe. PhD Instituto Politécnico Nacional

ELISEO - DANTÉS, Hortensia. PhD Universidad Hispanoamericana Justo Sierra

GIRÓN, Alicia. PhD Universidad Nacional Autónoma de México

GONZALEZ - GARCIA, Guadalupe. PhD Universidad Autónoma del Estado de México

ARRIETA - DÍAZ, Delia. PhD Escuela Libre de Ciencias Políticas y Administración Pública de Oriente

### **Assignment of Rights**

The sending of an Article to ECORFAN Journal Republic of Peru emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Originality Format for its Article.

The authors sign the <u>Authorization Format</u> for their Article to be disseminated by means that ECORFAN-Mexico, S.C. In its Holding Republic of Peru considers pertinent for disclosure and diffusion of its Article its Rights of Work.

# **Declaration of Authorship**

Indicate the Name of Author and Coauthors at most in the participation of the Article and indicate in extensive the Institutional Affiliation indicating the Department.

Identify the Name of Author and Coauthors at most with the CVU Scholarship Number-PNPC or SNI-CONACYT- Indicating the Researcher Level and their Google Scholar Profile to verify their Citation Level and H index.

Identify the Name of Author and Coauthors at most in the Science and Technology Profiles widely accepted by the International Scientific Community ORC ID - Researcher ID Thomson - arXiv Author ID - PubMed Author ID - Open ID respectively.

Indicate the contact for correspondence to the Author (Mail and Telephone) and indicate the Researcher who contributes as the first Author of the Article.

# **Plagiarism Detection**

All Articles will be tested by plagiarism software PLAGSCAN if a plagiarism level is detected Positive will not be sent to arbitration and will be rescinded of the reception of the Article notifying the Authors responsible, claiming that academic plagiarism is criminalized in the Penal Code.

#### **Arbitration Process**

All Articles will be evaluated by academic peers by the Double Blind method, the Arbitration Approval is a requirement for the Editorial Board to make a final decision that will be final in all cases. MARVID® is a derivative brand of ECORFAN® specialized in providing the expert evaluators all of them with Doctorate degree and distinction of International Researchers in the respective Councils of Science and Technology the counterpart of CONACYT for the chapters of America-Europe-Asia- Africa and Oceania. The identification of the authorship should only appear on a first removable page, in order to ensure that the Arbitration process is anonymous and covers the following stages: Identification of the Journal with its author occupation rate - Identification of Authors and Coauthors - Detection of plagiarism PLAGSCAN - Review of Formats of Authorization and Originality-Allocation to the Editorial Board-Allocation of the pair of Expert Arbitrators-Notification of Arbitration -Declaration of observations to the Author-Verification of Article Modified for Editing-Publication.

# Instructions for Scientific, Technological and Innovation Publication

# **Knowledge Area**

The works must be unpublished and refer to topics of business, administration-administrative, management-SME, management-tourism, hotel, management-financial, administration and other topics related to Social Sciences.

# **Presentation of the Content**

In Number is presented an article The learner's self-regulation and academic success by TEJERO-MENA, Paulo, CUEVAS-SOSA, Jorge and VERA-CHI, Lucely, with adscription at Universidad Tecnológica Regional del Sur, in the next article Evaluation of student perception of the social climate at the Universidad Tecnológica Fidel Velazquez and its relationship with the dropout rate by academic division by HERNÁNDEZ-CRUZ, María Guadalupe, VARGAS-GUTIERREZ, Luis Daniel and ROMERO-ROJAS, Ruth Marcela with adscription at Universidad Tecnológica Fidel Velazquez, in the next section Factors in the classroom: Ergonomics and inclusion by MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne with adscription at Ingeniería Mecatrónica del Tecnológico de Jiménez, in the next section Cultural appreciation of the tradition of Judas in the municipality of Cuitlahuac, Veracruz by BELLATO-GIL, Patricia Lyssette, AGUIRRE-MORALES, Fabiola, MENDOZA-LOYO, Octavio Iván and CASTILLO-BLANCO, José Said with adscription at Universidad Tecnológica del Centro de Veracruz.

# **Content**

Article	Page
The learner's self-regulation and academic success TEJERO-MENA, Paulo, CUEVAS-SOSA, Jorge and VERA-CHI, Lucely Universidad Tecnológica Regional del Sur	1-6
Evaluation of student perception of the social climate at the Universidad Tecnológica Fidel Velazquez and its relationship with the dropout rate by academic division HERNÁNDEZ-CRUZ, María Guadalupe, VARGAS-GUTIERREZ, Luis Daniel and ROMERO-ROJAS, Ruth Marcela Universidad Tecnológica Fidel Velazquez	7-14
Factors in the classroom: Ergonomics and inclusion MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne Ingeniería Mecatrónica del Tecnológico de Jiménez	15-21
Cultural appreciation of the tradition of Judas in the municipality of Cuitlahuac, Veracruz BELLATO-GIL, Patricia Lyssette, AGUIRRE-MORALES, Fabiola, MENDOZA-LOYO, Octavio Iván and CASTILLO-BLANCO, José Said Universidad Tecnológica del Centro de Veracruz	22-30

# The learner's self-regulation and academic success

# La autorregulación del aprendiz y su éxito académico

TEJERO-MENA, Paulo†\*, CUEVAS-SOSA, Jorge and VERA-CHI, Lucely

Universidad Tecnológica Regional del Sur. Directorate of Accounting, Mexico.

ID 1st Author: Paulo, Tejero-Mena / ORC ID: 0000-0002-8368-5732, CVU CONACYT ID: 297306

ID 1st Co-author: *Jorge, Cuevas-Sosa /* **ORC ID:** 0000-0003-0685-1116, **CVU CONACYT ID:** 298582

ID 2<sup>nd</sup> Co-author: *Lucely, Vera-Chi /* **ORC ID:** 0000-0003-2946-8937, **CVU CONACYT ID:** 272493

**DOI:** 10.35429/EJRP.2020.10.6.1.6 Received January 10, 2020; Accepted June 30, 2020

#### **Abstract**

This study was motivated by the low levels of academic achievement obtained by the University students, the objective was to explain the difference between those who are successful and those who are not. The theory of selfregulation of learning was used, so to identify them, a descriptive, non-experimental, cross-sectional, correlational study was carried out, with a convenience sample. The data were obtained through a survey, which reflects self-regulated learning, applied to 268 students, and was analyzed using the SPSS 18 statistic. The result was that, of the two roles of self-regulated learning, the one that has a greater relationship with outstanding academic performance was that of learning strategies in the components: metacognitive self-regulation and regulation of effort. Regarding the role of motivation, only the anxiety component was related to this performance, in the opposite direction: the higher the anxiety, the lower the academic performance. It is recommended to implement an institutional program to reinforce learning strategies, with special emphasis on metacognitive self-regulation and effort regulation. In the case of anxiety, it is recommended to deepen the study of the causes that originate it, to reduce its incidence.

# Learning, self-regulated learning and effective learning

#### Resumen

Este estudio fue motivado por los bajos niveles de aprovechamiento académico obtenido por los estudiantes de la Universidad, el objetivo fue explicar la diferencia entre aquellos que son exitosos y los que no. Se utilizó la teoría de la autorregulación del aprendizaje, por lo que para identificarlos se efectuó un estudio descriptivo no experimental, transversal, de tipo correlacional, con una muestra por conveniencia. Los datos fueron obtenidos a través de una encuesta, que refleja el aprendizaje autorregulado, aplicada a 268 alumnos y fueron analizadas mediante el estadístico SPSS 18. El resultado fue que, de los dos roles del aprendizaje autorregulado, el que tiene una mayor relación con el rendimiento académico sobresaliente fue el de las estrategias de aprendizaje en los componentes: autorregulación metacognitiva y regulación del esfuerzo. En cuanto al rol de la motivación, únicamente el componente ansiedad presentó relación con este rendimiento, en sentido inverso: a mayor ansiedad rendimiento académico. Se recomienda implementar un programa institucional de reforzamiento de las estrategias de aprendizaje, dando especial énfasis en las de autorregulación metacognitiva y de regulación del esfuerzo. En el caso de la ansiedad, se recomienda profundizar en el estudio de las causas que la originan, para reducir su incidencia.

### Aprendizaje, Aprendizaje autorregulado y Aprendizaje eficaz

Citation: TEJERO-MENA, Paulo, CUEVAS-SOSA, Jorge and VERA-CHI, Lucely. The learner's self-regulation and academic success. ECORFAN Journal-Republic of Peru. 2020. 6-10:1-6.

<sup>\*</sup> Author Correspondence (Email: paulotejero@gmail.com)

<sup>†</sup> Researcher contributing as the first author.

### Introduction

Over the years, a constant deterioration in the academic performance of the students of this institution has been observed, regardless of the academic program to which they are enrolled. It is important to mention that since the gradual implementation of the competency-based learning model, this deterioration has been more evident, worsening the gap between outstanding students and those who are not. Which leads to the following statements, what are the factors that characterize the profile of a student with self-regulated learning? Are these factors common to all academically outstanding students?

The fact of verifying if the presence of the factors that characterize a self-regulated academically learning profile results in outstanding students, will allow the educational authorities of the Southern Regional Technological University to have information for making decisions that have the purpose of adapting its educational strategies in such a way that they lead it to achieve its mission as an institution and to consolidate its presence in the region.

It will also allow students to develop their capacities through the approach of strategies in order to promote self-regulated learning without this meaning adding special courses or workshops. The strategies must be within the framework of the subject that the student is studying; which means that teachers must also exercise their role within the context of competencies.

All this will have a direct impact on generating competent professionals to achieve their better insertion into economic and social life, which will result in a comprehensive improvement in their communities of origin and in the region in general.

In the Introduction section, we describe the problem that we want to solve, its importance for our institution, its main characteristics and the hypothesis that we want to demonstrate by characterizing the chosen theory. In the Development we explain the type of study carried out, the instrument used. The population we work with, as well as the main results obtained.

Finally, we point out the conclusions we reached regarding whether the presence of the different components of Self-regulated Learning affect the better academic achievement of university students, as well as the suggestions we make to improve our educational performance based on in the same.

# **Development**

The research was non-experimental, there was no deliberate manipulation of variables, within the non-experimental studies the descriptive and correlational transectional design was chosen, characterized by the collection of information in a single time and moment.

The MSLQ (Motivated Strategies Learning Questionnaire) instrument was applied, an instrument that has a Likert-type response scale format and is organized into two sections.

One of these specifically measures the motivation that is put into play during learning, made up of 31 items; and another, made up of 50 items, assesses the learning strategies. In its totality it is made up of 81 items distributed in scales (Cognition: Essay, Elaboration, Organization, Critical thinking, Metacognition; Motivation and Affectivity: Intrinsic goals, extrinsic goals, Task value, Control over the beliefs of the learning itself, Self-efficacy, Anxiety Test; Behavior: Regulation of effort, Search for help, Environment and study time; Context: Peer learning, Environment and study time; which for its application it was necessary to find in its version in Spanish and complete, the which has been validated in multiple previous studies.

The population was made up of the total number of students in the third semester who are studying one of the careers taught at the Universidad Tecnológica Regional del Sur in its five academic programs, from which 268 valid surveys were applied (table 1).

		Frequency	Percentage	Valid	Accumulated
				percentage	percentage
Valid	Accountancy	48	17.9	17.9	17.9
	Business development	27	10.1	10.1	28.0
	tourism	130	48.5	48.5	76.5
	Information technology	35	13.1	13.1	89.6
	Mechatronic	28	10.4	10.4	100.0
	Total	268	100.0	100.0	

**Table 1** Students by career *Source: Own elaboration* 

Source: Own elaboration

The applied surveys yielded demographic data indicating that the average age and grade is 19 and 8.95 respectively. 62% are men -162- and 38% women -101-. The average of studies achieved by both the father and the mother is of the first grade of secondary school and 80% of the families have incomes of less than five thousand pesos.

The instrument was self-applied by students of all academic programs within the university facilities, either in classrooms or in auditoriums with the authorization of the career directors and with the supervision of the researchers.

The analysis of the data collected in the application of the instrument was carried out with the help of the PASW Statistics 18 program.

#### **Results**

Next, the results of the investigation are presented, by means of tables that indicate the statistical data obtained from the application of the instrument according to the established objectives.

Regarding objective 1, Determine the characteristics of the self-regulated learning profile present in the students of the Universidad Tecnológica Regional del Sur, tables 2, 3, 4 and 5 show the average results according to the sections, components, strategies and scales established in the MSLQ.

Value components		Intrinsic targeting goals	Extrinsic orientation goals	Task Value
N	Valid	268	268	268
	Lost	0	0	0
Mear	1	3.9935	4.3741	4.3016
Mode		3.75	5.00	4.67
Dev.	typ.	.55520	.63508	.54139

**Table 2**Descriptive statistics of Motivation *Source: Own elaboration* 

As can be seen in Table 2, on average the university students present high levels of motivation (value 4), in the value components - the extrinsic orientation goals being the ones with the highest presence, followed by the value of the task.

		Expectation	components	Affective Component
		Control beliefs	Self- efficacy for learning	Anxiety
N	Valid	268	268	268
	Lost	0	0	0
Mear	1	4.0998	3.9697	3.0119
Mod	e	4.00	3.88	3.2
Dev.	typ.	.56677	.63347	.86748

**Table 3** Descriptive statistics of Motivation *Source: Own elaboration* 

Table 3 shows that, on average, university students also present high levels of motivation (value 4) in the expectation's components —with a greater presence of the control belief—. The present levels of the affective component anxiety are important since this usually occurs among students (value 3).

Cognitive and metacognitive strategies		Repetition	Elaboration	Organization	Critical thinking	Metacognitive self- regulation
N	268	268	268	268	268	268
	0	0	0	0	0	0
Mean		3.7453	3.3744	3.5317	3.4201	3.5628
Mode		4.00	3.33	3.75	3.40 <sup>a</sup>	3.92
Dev. typ.		.80304	.77208	.74100	.75672	.60001

**Table 4** Descriptive Statistics of Learning Strategies *Source: Own elaboration* 

Resource management strategies		Time and environment management	Regulation of effort	Peer learning	Help search
N	Valid	268	268	268	268
	Lost	0	0	0	0
Mean		3.4991	3.7239	3.3035	3.4991
Mode		3.50	3.75	3.33	3.50
Dev. typ.		.57471	.71910	.83809	.57471

**Table 5** Descriptive statistics of Learning Strategies *Source: Own elaboration* 

Regarding the section on learning strategies (tables 4 and 5), on average university students usually use them (3), repetition being the most used in terms of cognitive and metacognitive strategies, followed by self-regulation. Regulation of effort is the most widely used strategy in terms of resource management.

From the results obtained in the previous tables, it can be pointed out that university students have higher levels of motivation since this is almost always presented in comparison with those of learning strategies which are usually presented.

Objective 2 of the research is to determine if there is a relationship between the self-regulated learning profiles present at the University and the outstanding academic performance of its students.

To do this, as indicated in the methodology section, with the total number of students, three groups were created, students with outstanding performance, average and non-outstanding, based on their general averages. Of these groups, only the first and last were selected to contrast the profiles present in each group and subsequently determine if there is a relationship between the degree of their presence and the performance obtained.

In the first instance, we analyze motivation in its value component (Table 6). The most frequent type of motivation in the case of students considered outstanding is the value of the task, while in non-outstanding students they are extrinsic orientation goals.

	Intrinsic	targeting goals	Extrinsic or	rientation goals	Task value		
	Outstanding Not outstanding		Outstanding Not outstanding		Outstanding	Not outstanding	
N						41	
Valid	51	41	51	41	51		
Lost	0	0	0	0	0	0	
Mean	4.0539	4.0061	4.1912	4.2378	4.4314	4.2114	
Mode	4.25	4.50°	5.00	4.50	5.00	4.00	
Dev. typ.	.56417	.59814	.71167	.76025	.52934	.63904	

 $\begin{tabular}{ll} \textbf{Table 6} & \textbf{Motivation. Value component. Outstanding / Not} \\ \textbf{Outstanding Comparison} \\ \end{tabular}$ 

Source: Own elaboration

In Tablet 7 it can be observed that the expectation component with the greatest presence for both outstanding and non-outstanding students is the belief of control.

		Contro	l beliefs	Self-efficacy for learning		
		Outstanding	Not	Outstanding	Not	
			outstanding		outstanding	
N	Valid	51	41	51	41	
	Lost	0	0	0	0	
Mean		4.1471	4.0671	4.1054	3.7622	
Mode		4.00°	4.25	4.38	3.88	
Dev. ty	p.	.59619	.56187	.54565	.70145	

**Table 7** Motivation. Expectations component. Outstanding / Not Outstanding Comparison Source: Own elaboration

Regarding the affective component, anxiety, this is present more frequently among non-outstanding students (Table 8).

		Anxiety					
		Outstanding	Not outstanding				
N	Valid	51	41				
	Lost	0	0				
]	Mean	2.5804	3.2976				
Mode		2.20a	3.40				
Dev. typ.		1.00499	.86962				

**Table 8** Motivation. Affective component. Outstanding / Not Outstanding Comparison

Source: Own elaboration

With regard to learning strategies, as we can see in Table 9, repetition is the cognitive strategy most used by both outstanding and non-outstanding students.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved.

ı		Repetición		Elab	Elaboración		Organización		Pensamiento crítico	
Г		Sobreslte	No sobresite	Sobreslte	No sobreslte	Sobreslte	No sobresite	Sobreslte	No sobreslte	
ſ	N Valid	51	41	51	41	51	41	51	41	
П	Lost	0	0	0	0	0	0	0	0	
- [	Mean	4.0245	3.5183	3.6307	3.1748	3.8186	3.3415	3.5686	3.3073	
	Mode	4.00°	3.50°	3.67	3.33	4.25	3.75	3.80	4.00	
Г	Dev. typ.	.65813	.91240	.80091	.98245	.68571	.87813	.88306	.81375	

**Table 9** Learning strategies. Cognitive strategies. Outstanding / Not Outstanding Comparison

Source: Own elaboration

As for metacognitive self-regulation strategies (Table 10), these, in a marked way, have a greater presence in outstanding students.

		e self-regulation Not outstanding	
N	Valid	51	41
	Lost	0	0
Me	an	3.8889	3.3028
Mo	de	4.58	2.58 <sup>a</sup>
Dev	v. typ.	.59504	.68307

**Table 10** Learning strategies. Metacognitive strategies. Outstanding / Not Outstanding Comparison

Source: Own elaboration

Finally, the regulation of effort in outstanding students and the search for help and time management in equal parts for non-outstanding students, were the resource management strategies that had the greatest presence (Table 11).

Time and environment management		ment management	Regulatio	n of effort	Feer la	aming		Help search	
			Do not startle		Do not statie		Do not statle		No envelopes its
N	Valid	51	41	51	41	51	41	51	41
	Lost	0	0	0	0		0		0
Mean		3.5245	2.4695	4.0794	3.3902	3.3922	3.2033	3.5245	3.4695
Mode		4.00	3.00*	2.75*	3.00	3.33	3.33	4.00	2.004
Dev. typ.		.68603	.60775	25745	78272	79918	.99654	68653	.607%

**Table 11** Learning strategies. Resource management strategies. Outstanding / Not Outstanding Comparison *Source: Own elaboration* 

Given the results obtained in the contrast of the profiles manifested between the two groups, in which a greater presence of the positive components and strategies is generally observed in students with outstanding performance and of the negative component - anxiety- in non-outstanding students, the correlations were determined to establish which of them are effectively related to the presence of better academic performance. The results are shown below in tables 12, 13 and 14.

	Intrinsic targeting goals	Extrinsic orientati on goals	Task value	Control beliefs	Self- efficacy for learning	Anxiety
Pearson's correlation	.036	048	.201	.051	.277"	403**
Sig. (Bilateral)	.731	.652	.055	.630	.008	.000
N	92	92	92	92	92	92

**Table 12** Correlations. Motivation / Overall Average *Source: Own elaboration* 

Analyzing the results of the motivation section present in the university students (Table 12), we observe that none of the value components –intrinsic or extrinsic goals, task value- is related to outstanding performance. For its part of the expectation's components –beliefs of value and self-efficacy for learning- only the latter has a positive correlation although this is low (0.2 to 0.39). Where there is a moderate negative correlation (0.40 to 0.69) is in the affective component, anxiety. Both the low and moderate correlation were presented with a significance level lower than 0.01.

Where we find a greater correlation between the self-regulated learning profile and outstanding performance is in the learning strategies section, since in this section we observe from a low correlation in the cognitive strategies of repetition, organization and elaboration, to a moderate one in the strategy of metacognitive self-regulation and in the resource management strategy, effort regulation (tables 13 and 14).

	Repetition	Elaboration	Organization	Critical thinking	Metacognitive self- regulation
Pearson's correlation	.301**	.268**	.303**	.172	.439**
Sig. (Bilateral)	.004	.010	.003	.101	.000
N	92	92	92	92	92

 Table 13 Correlations. Learning strategies / General average

Source: Own elaboration

	Time and environment management	Regulation of effort	Peer learning	Help search
Pearson's correlation	.052	.461**	.108	.052
Sig. (Bilateral)	.624	.000	.306	.624
N	92	92	92	92

 Table 14 Correlations. Learning strategies / General average

Source: Own elaboration

# Acknowledgments

Acknowledgments We are grateful for the support of our institution, which in order to improve the teaching-learning processes for the fulfillment of its mission, allocated time and resources to carry out this research.

### Conclusions

The presence of factors that characterize a selfregulated learning profile results in students of outstanding academic performance. Hence the importance of continuing to carry out studies on this topic, even using different theories to obtain conclusive evidence. as well determining relationships between the motivational components and learning strategies themselves to determine the effect they have on each other. If we want to fulfill our educational mission, to develop talented young people who reach their full potential, we must have better institutional tools that contribute to it.

#### References

Castellanos, S. y otros. (2011). Cuestionario de Evaluación del Procesamiento Estratégico de la Información para Universitarios. Revista Electrónica de Metodología Aplicada. Vol. 16 No. 2, Pp 15-28.

Cázares, A. (2009). El papel de la motivación intrínseca, los estilos de aprendizaje y estrategias metacognitivas en la búsqueda efectiva de información online. Revista de Medios y Educación. Núm. 35, pp. 73-85. Recuperado el día 10 de julio de 2017 en http://acdc.sav.us.es/ojs/index.php/pixelbit/artic le/viewFile/660/557

Daura, Florencia (2010). DOCENTES. El aprendizaje autorregulado y su orientación por parte del docente universitario. Congreso Iberoamericano de Educación Metas 2021. Recuperado en https://www.researchgate.net/profile/Florencia\_Daura3/publication/228395668\_El\_aprendizaje\_autorregulado\_y\_su\_orientacion\_por\_parte\_de l\_docente\_universitario/links/54fdf98f0cf2672e 223e9cb2.pdf.

Delors, J. (1996). La Educación Encierra un Tesoro. Compendio de la UNESCO.

García, J. (2011). Modelo Educativo Basado en Competencias: Importancia y necesidad. Revista Electrónica Actualidades Investigativas en Educación. Vol. 11 No. 3. Pp. 1-24.

Hernández, L. (2015). Autoeficacia Académica y Estrés en estudiantes de Educación Superior Tecnológica.

Lamas, Héctor (2008). Aprendizaje autorregulado, motivación y rendimiento académico. Liberabit. Recuperado en http://www.scielo.org.pe/pdf/liber/v14n14/a03v14n14.pdf.

Leal, M. y Martín, M. (2009). Cuestionario de Estrategias y Motivación para el Aprendizaje (MSLQ) por alumnos del ITESM.

Pintrich, P. R. and De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. Journal of Educational Psychology 82(1).

Pintrich, P. (1998). El papel de la motivación en el aprendizaje académico autorregulado. En S. Castañeda (coord.). Evaluación y fomento del desarrollo intelectual en la enseñanza de ciencias, artes y técnicas. Perspectiva internacional en el umbral del siglo XXI (pp. 229-262). México: Miguel Ángel Porrúa.

Pintrich, P. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. Pintrich & M. Zeidner (eds.). Handbook of Self-Regulation (pp. 451-502). San Diego: Academic Press.

Torrano, Fermín, González, María (2004). El aprendizaje autorregulado presente y futuro de la investigación. Revista Electrónica de Investigación Psicoeducativa. Recuperado en http://www.investigacion-

psicopedagogica.org/revista/articulos/3/espanno l/Art\_3\_27.pdf.

Pintrich, P. R. (1998). "El papel de la motivación en el aprendizaje académico autorregulado". En: CASTAÑEDA, S. (Coord.) Evaluación y fomento del desarrollo intelectual en la enseñanza de ciencias, artes y técnicas. Perspectiva internacional en el umbral del siglo XXI. (1era Edición, 229-262) México: Miguel Ángel Porrua.

Pintrich, P. R. (2000). "The role of goal orientation in self-regulated learning". En: BOEKAERTS, M., PINTRICH, PAUL R. & ZEIDNER, M. (Editors). Handbook of Self – Regulation. (1fst. rd. pp. 451-502). San Diego: Academic Press.

Pintrich, P. R. (2002). "The Role of Metacognitive Knowledge in Learning, Teaching, and Assessing". Theory into Practice, Vol. 41, (4), 219-225. Recuperado el 27 de noviembre de 2009, de la base de datos EBSCO.

Pintrich, P. R. (2004). "A Conceptual Framework for Assessing Motivation and Self-Regulated Learning in College Students". [versión electrónica] EducationalPsychology Review, 16 (4): 385-407.

Sepulveda S. M. (2013). Diferencias entre estrategias de aprendizaje y motivación, en grupos progresivos y no progresivos, (Trabajo fin de Master). Recuperado de http://cdigital.dgb.uanl.mx/te/1080256658.

Schunk, D. H. (2005). Self-Regulated Learning: The Educational Legacy of Paul R. Pintrich. Educational Psychologist, 40(2), 85-94. Recuperado el 29 de junio de 2017 en Recuperado de http://dx.doi.org/10.1207/s15326985ep4002\_3

Zoraida, J. (1997). La modernización educativa (1988-1994). Journal Article. Vol. 46, No. 4. Homenaje a don Edmundo O'Gorman (Apr. - Jun., 1997), pp. 927-952 Publicado por El Colegio de Mexico y Consultado el 20 de junio en Stable URL: http://www.jstor.org/stable/25139099

Zimmerman, B. J. (2000). Attaining self regulation: a social cognitive perspective. In M. Boekaerts, P. Pintrich & M. Zeidner (eds.). Handbook of Self-Regulation (pp. 13-38). San Diego: Academic Press. www.instagram.com

# 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

HERNÁNDEZ-CRUZ, María Guadalupe\*†, VARGAS-GUTIERREZ, Luis Daniel and ROMERO-ROJAS, Ruth Marcela

Universidad Tecnológica Fidel Velazquez, Mexico.

ID 1st Author: María Guadalupe, Hernández-Cruz

ID 1st Coauthor: Luis Daniel, Vargas-Gutierrez

ID 2<sup>nd</sup> Coauthor: Ruth Marcela, Romero-Rojas

**DOI:** 10.35429/EJRP.2020.10.6.7.14

Received January 15, 2020; Accepted June 30, 2020

#### **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, coincidently 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 realizo 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 academica donde estaban matriculados. La fase B consistio 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 academica. Esta afirmación deriva de los resultados obtenidos, pues la división de contabilidad tiene la mejor percepción de clima social, coincidentemente es la división academica 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 academica 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 numero de bajas.

Clima social, Bajas académicas, Estrategias de retención

**Citation:** HERNÁNDEZ-CRUZ, María Guadalupe, VARGAS-GUTIERREZ, Luis Daniel and ROMERO-ROJAS, Ruth Marcela. Evaluation of student perception of the social climate at the Universidad Tecnológica Fidel Velazquez and its relationship with the dropout rate by academic division. ECORFAN Journal-Republic of Peru. 2020. 6-10:7-14.

<sup>\*</sup> Correspondence to Author (Email: guadalupe@utfvejecutivas.org)

<sup>†</sup> Researcher contributing first author.

### Introduction

School retention is understood as the capacity of 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 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.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved.

### 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 institution, perceived in an there microclimates within the school context that sometimes act as protectors against the broader social climate. For example, in a context of management perceived 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 X 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.)

ISSN-On line: 2414-4819 ECORFAN® All rights reserved.

Table 1 presents the characteristics of the social climate concept. The organizationalschool 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, 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 envioronment 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, quasiexperimental 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 which they are enrolled: in 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.

### References

Aron M. (1999) Clima social escolar y desarrollo personal. Un programa de mejoramiento. Santiago: Editorial Andres Bello

Astin, A. (1993). What Matters in College? Four Critical Years Revisited. San Francisco Jossey-Bass.

Bean, J. (1980). Dropouts and turnover. The synthesis of a test of causal models of student attrition. Research in Higher Education 12: 155-187.

Hagedorn, L. S. (2005). How to define retention: A new look at an old problem. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 89-105). Westport, CT: American Council on Education and Praeger Publishers.

OEA (2003). Documentos bases del proyecto: estrategias y materiales pedagógicos para la retención escolar. Ministerio de Educación, Ciencia y Tecnologia.

Saweczko, A. M. (2008) A web of ways: Navigating the Myriad of Perspectives on Student Persistence and Institutional Retention in Postseondary Education. In Partial Fulfillment the Degree requeriments for Education 6890, Fort he degree of Master of Education Faculty of Education, Memorial University of Newfoundland St. John's, Newfoundland. August 4, 2008. Recuperado en:http://www.oura.ca/documents/Student\_Persistence\_and\_Retention.pdf

Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition. (2nd ed.). Chicago, IL: The University of Chicago Press

Torres E. (2010) Estado del arte de la retención de estudiantes de la educación superior. Pontificia Universidad Javeriana. Facultad de educación, Secretaría de Planeación. Bogotá, Colombia.

# Factors in the classroom: Ergonomics and inclusion

# Factores en el aula: La ergonomía y la inclusión

MARTÍNEZ, María Teresa\*†, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne

Ingeniería Mecatrónica del Tecnológico de Jiménez

ID 1st Author: María Teresa, Martínez

ID 1st Coauthor: Javier, Montoya

ID 2<sup>nd</sup> Coauthor: Bertha Ivonne, Sánchez

**DOI:** 10.35429/EJRP.2020.10.6.15.21

Received January 20, 2020; Accepted June 30, 2020

#### **Abstract**

Research results are shared to place the influence of some factors in a classroom and certain physical characteristics, in the academic performance of a group of differential calculus of mechatronics engineering of "Tecnológico de Jiménez", for which an application survey was designed, they were physical measurements and environmental variables, anthropometric data, consideration characteristics of each person's predisposition to use a hand writing and different strategies of arrangement of furniture, a base was the consideration of ergonomics, little used in educational process, another base was the diversity in terms of inclusion of people with physical characteristics not considered abnormal, therefore go unnoticed by most, in our case are called students. Contribution: Share of a furniture arrangement for greater benefit, to proposed changes in the use of study chairs and tables. Consideration of the impact of factors such as lighting and noise in the academic process within a classroom.

#### Students, Incorporation, Ergonomics

#### Resumen

Se comparten los resultados de investigación para situar la influencia de algunos factores en un aula y ciertas características físicas, en el rendimiento académico de un grupo de cálculo diferencial de Ingeniería Mecatrónica del Tecnológico de Jiménez, para lo cual se diseñó una encuesta de aplicación, fuerón medidas variables ambientales físicas, datos antropométricos, V consideración de características de predisposición de cada persona para utilizar una mano al escribir y diferentes estrategias de acomodo de mobiliario. Una base fué la consideración de la ergonomía, poco utilizada dentro del proceso educativo, y otra base fué la diversidad, en cuanto a la inclusión de personas con características físicas no consideras anormales, por lo cual pasan desapercibidas por la mayoría, en nuestro caso se llaman "estudiantes". Contribución: Aportación de un acomodo de mobiliario de mayor beneficio, hasta modificaciones propuestas en el uso de sillas y mesas de estudio. Consideración del impacto que tienen factores como iluminación y ruido en el proceso académico dentro de un salón.

#### Estudiantes, Inclusión, Ergonomía

**Citation:** MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne. Factors in the classroom: Ergonomics and inclusion. ECORFAN Journal-Republic of Peru. 2020. 6-10:15-21.

<sup>\*</sup> Correspondence to Author (Email: mtmartineztec@gmail.com)

<sup>†</sup> Researcher contributing first author.

### Introduction

When considering all educational process, the core part is always "the student", which for at least one occasion we have been each and every one of us, because in our working and ordinary life we have stages and situations of learning and others of teaching, whether we are teachers by profession or not. Comfort plays a role of interest within said academic process and it is very unusual to invest time and resources in this matter. Educational inclusion currently also demands a greater interest on the part of the competent authorities and has not yet managed to appear on the list of study priorities as it should, as it demands the adaptation of the teaching and learning processes characteristics and needs of all students that enable their presence, participation and progress in the classroom. If we analyze the response of the education system to the needs raised by the educational community, we find, in all probability, an obvious mistake in the opportunities offered to students with specific needs. (Salinas, 2010).

Left-handers preferably use their left hand for writing, trimming, combing their hair, and for all common activities that require the use of their hands. (Medina and García, 2010).

It is not necessary to reflect much on the fact that most students consider numerical subjects as the most complex, this influences a predisposition in the teaching-learning process coupled with the physical factors that may be present in the short environment where the subjects. In a work environment, generally in the industry, redesign is common to adapt workstations and tools to the person who occupies them and thus provide support to the employee in their daily activities.

In a public school classroom the demand for furniture and equipment never ends, and the existing one is only minimally adequate.

Ergonomics is the study of work in relation to the environment in which it is carried out (the workplace) and with those who carry it out (the workers). (International Labor Organization).

Ergonomics is also a scientific-technical and design discipline that comprehensively studies man (or groups of men) in their framework of action related to the handling of equipment and machines, within a specific work environment. (Ramírez, 1989). In addition, it seeks to prevent accidents and occupational diseases and optimize activity, as well as avoid fatigue and human error. (Federal Regulations on Safety, Hygiene and Work Environment. Article 2, section V. 1997).

In analysis of the aforementioned definitions, we can arrive at that ergonomics seeks to adapt the environment to man, without damaging it. In the dimensional design of workstations, valid for the design of teaching classrooms, anthropometry and the principles of ergonomics are used as main tools to adapt the environment to people. (San Martín Páramo, 2003).

In ergonomic workstation design, four main human-machine relationships are considered:

Dimensional relationships, informational relationships, control relationships and environmental relationships (San Martín Páramo, 2003).

In this sense, in the assigned classroom it was necessary to consider as study characteristics:

- Physical factors. Chairs, tables, desk and signs.
- Environmental factors. Noise, lighting, accommodation spaces.
- The personal characteristic in the ability to write with the right or left hand.

Through this project, it has been sought to raise awareness of the obstacle that exists in the teaching-learning process in a higher level school, in terms of the design and arrangement of the place and furniture where academic activities are developed for the benefit or detriment of those who they develop the role of capable students in the situation.

It was necessary to obtain information to make a diagnosis, and start from the general to the particular, thus, through the use of observation and data collection in the real place of study, which is the teaching of the class, and to be able to analyze the activities carried out in practice and then search for feasible strategies for improvement.

- Classroom assignment.
- Number of assistants and teacher.
- Observation of the characteristics of the classroom and equipment used in general.
- Student behavior in class.
- Application of a survey to gather more information through the student.
- Analysis of the dimensions of the tables and chairs for the student.
- Anthropometric data of the students to obtain the standard measure.
- Observation focused on the student when verifying the position of the student when writing.
- Student-focused observation when analyzing the blackboard during class.

Aim. Identify and propose the optimal environmental and physical factors in a classroom of engineering careers.

And the question posed during the process, does the design of the furniture, its distribution and the environment within a classroom influence the academic interest of the student in the teaching-learning process?

# Methodology to be developed

In this work, the survey and direct observation of the actions developed by those involved have been of fundamental importance, a questionnaire was applied to a total of 32 students, with the entire class group being 28 men and 4 women facing their first problems academics at the Institute. Below are some of the results graphically. Figure 1 is focused on the condition of space shared by several classmates within a class table, not only to write their notes and develop operations in what they attend to the class, but also to store their personal supplies.

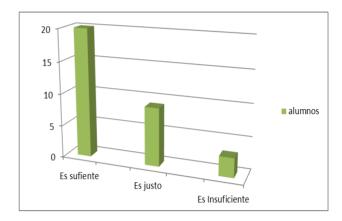


Figure 1 Class table space evaluation

In Figure 2, the condition that occurs when the teacher requests that the student pass and perform an exercise is observed, whether or not it is easy for him to write based on the height of the blackboard, the comfort of his arm-hand, and the feeling that what you write is seen by your peers in a simple way.

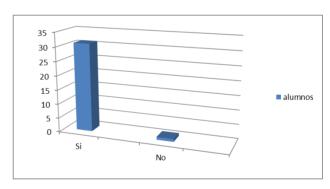


Figure 2 Assessment of writing on the blackboard according to student characteristics

Figures 3 and 4 analyze which of the three furniture distributions, which were used during the study, as a strategy when teaching the class, was most accepted by the students.



Figure 3 Different furniture distributions.

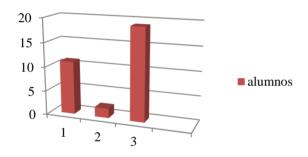


Figure 4 Acceptance of furniture distributions in the classroom

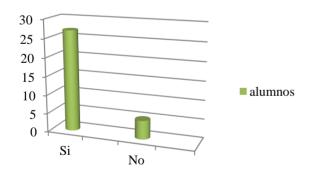


Figure 5 Comfort of the chairs used

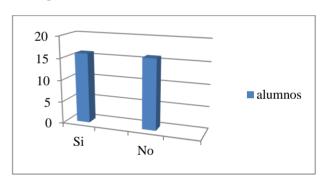
Figure 5 represents the answers that young people provide about whether the chair used in the classroom was comfortable for them to facilitate their attention during class time.

Figure 6 is a photograph that shows the arrangement of the classroom in the first days when the information for this project began to be collected.



Figure 6 Distribution of tables and chairs in the classroom

Within Figure 7, the relationship between the distance between the different work tables of the students and the place where the blackboard is embedded is considered, taking into account the analogy that the more distance the greater the problem to visualize and listen to another person, answering more than half of the group affirmatively to such problem. The assigned classroom has dimensions of: 9.60 meters long, 5.95 meters wide and a height from floor to ceiling of 3.03 meters.



**Figure 7** Evaluation of the distance to attend the class in a convenient way

In relation to the previous information, Table 1 shows the results of the measurements made at the lighting levels found on an ordinary day of class within the selected classroom and the description of the calculations obtained through statistics is observed, With the support of the minitab 16 software, 32 samples were taken, establishing 5 strategic points in the classroom for data collection, which can be observed in figure 8.

The only place of the 5 points to study mentioned above that goes within the range as a minimum of luxes, is in the place (center of the classroom) light on, since a maximum of 335.87lux was obtained, the closest points to being within of the range as a minimum intensity of good lighting, we have the side (Lower right) light on with a maximum of 245.76lux.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved. MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne. Factors in the classroom: Ergonomics and inclusion. ECORFAN Journal-Republic of Peru. 2020

The second place is the side (Upper right) light on with a maximum of 204.80 lux. Since good lighting is considered to have the following points as intensity: at least 300 lux, recommended 400 lux and optimal 500 lux. (San Martin, 2003). Which can be seen that the other points studied with the light on go below the appropriate range to have good lighting in the classroom.

Classroom location	Half	Median	Minimum	Maximum
(Lower	69.120	69.632	61.440	77.824
right) light	07.120	07.032	01.440	77.024
off.				
(Lower	58.240	57.344	57.344	61.440
left) light				
off.				
(Center of	87.04	90.11	65.54	102.40
classroom)				
light off.				
(Upper	45.57	45.06	28.67	57.34
right) light				
off.				
(Top left)	45.337	45.056	40.960	49.960
light off.				
(Lower	217.98	217.09	167.94	245.76
right) light				
on.				
(Lower	169.98	172.03	159.74	176.13
left) Light				
on.				
(Center of	310.40	315.39	270.34	335.87
the				
classroom)				
Light on.	102.55	104.55	152.62	204.00
(Upper	192.77	194.56	172.03	204.80
right) Light				
on.	1 60 22	1.57.0.1	162.61	104.22
(Upper left)	169.22	167.94	163.84	184.32
Light on.	ĺ			

Table 1 Result of lighting sampling obtained

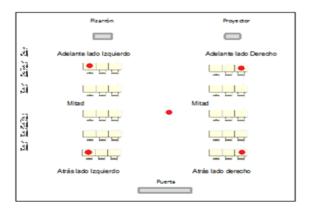


Figure 8 Strategic points in the classroom layout

Tables 2 and 3 are associated with the results obtained from the tests carried out in the classroom to know the intensity of the noise, a science cube noise sensor was used as an instrument, measured in decibels two days to do the sampling, in the which were made 32 samples every day.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved. As can be seen on the second day, the decibels rose, considering that these tests were carried out with the same number of students and the air turned off, unlike on the first day.

59.0964	57.1428	57.9975	63.3699	31.2576	58.1196	64.4688	74.3589
64.1025	7.8144	51.6483	54.2124	53.2356	62.5152	17.0940	12.5763
18.0708	52.3809	47.8632	54.5787	14.0415	19.6581	16.9719	16.9719
17.4630	12.2100	9.2796	9.6459	9.6459	9.6459	15.0183	12.4542

**Table 2** Decibel Samples - Day 1

51.5262	49.8168	46.8864	46.6422	48.1074	55.6776	51.6483	48.9621
50.9157	48.8400	57.1428	55.0671	57.2649	54.7008	66.5445	63.7362
61.9047	60.3174	53.3577	51.6483	55.5555	58.6080	57.5091	52.5030
52.5030	52.5030	50.5494	54.4566	55.3113	52.1367	52.5030	54.8229

Table 3 Decibel samples. Day 2

#### Results

Most of the students considered that the space at each class table is adequate to take notes and develop exercises, even to have the rest of their school supplies, even with three classmates sharing the table, few considered it fair, but without a doubt, the The place occupied by a student with left-handed characteristics must be considered, since an individual with this condition cannot sit in any of the three positions of the chairs that occupy the work table, as it should preferably be the place on the left side to facilitate movement of your arm-hand that you use the most.

The height of the blackboard is accepted as adequate, since 93.75% of the students stated that they could easily write when passing to the front, without having to make an effort to reach the maximum and minimum height when making the lines, despite within the small percentage that did not agree with the above is the left-handed participant, who feels that what he writes on the blackboard is covered by his body when following the development of an operation, making it difficult for his colleagues to follow up on the resolution process, This situation seems uncomfortable to him since he considers that it complicates the exercise monitoring for the rest of the group.

Regarding the three different furniture distributions that were made within the classroom, arrangement c) was the one most accepted by students, which is understandable from the point of view that if there were more than one left-handed student, they would have more positions than it could occupy when sitting without feeling discomfort of bumping into the arm of a partner, adding to this that it allows greater integration of the group. Option b) was the least selected, and from the ergonomic sense, in this type of distribution there would only be one position where a person with a left-handed characteristic could be comfortable.

Regarding the chair used in class, most of the students considered it comfortable to work in it, adding to this answer the anthropometric analyzes carried out.

However, 43.75% of the students considered not listening appropriately to the teacher or classmates when giving an explanation, and half of the group found it difficult to visualize the blackboard from the back of the room, situations that are considered of great importance, given that in the teaching-learning process, in the stage of explanation of the subject by the teacher.

Both the auditory and visual senses must be integrated in such a way as to facilitate the sequence of steps developed to reach a good understanding.

The ideal lighting should be natural (Mondelo, 2000), but as it can be seen in Table 1, the light that enters through the windows is totally insufficient to have a good quality, and with regard to artificial light it can be observed that There is not enough light intensity inside the classroom necessary for users in class, since only the side (center of the classroom) was within the established, which can lead to generate visual fatigue, followed by mental fatigue that causes loss of interest for the activity. (Mondelo, 2000)

It can be associated that for there to be a controlled sound level in the room, it will depend on the students as well as the teacher directly to promote an integral environment with respect to hearing comfort, with good discipline and behavior, as well as considering the maintenance of external factors such as Refrigeration equipment.

### **Conclusions**

This work belongs to a line of educational research, which has the objective of being able to strengthen the improvement of academic quality. In addition, this project seeks to make known that educational inclusion even at the undergraduate level is still important to consider, because currently not as it should be, but there is a greater focus on the attention to educational diversity at the basic level of the system school, unlike past decades in our country, however young people who are currently pursuing a professional career did not have a training and culture in this regard when completing their period of primary education.

#### Recommendations

It is important to look for different alternatives to accommodate the equipment and furniture in the classroom, recognizing functional ways since this not only reinforces the relationship between teacher-student and student-student, but also pushes the student to modify their attitude in class due to the novelty of the distribution.

The analysis carried out shows us that redesigning designing, and making accommodations for the media is normally the best thing to do, but people with extreme physical complexions or with different characteristics, in our case when writing with the left hand suffer discomfort in the teaching process, a A clear example is how in three different work table layouts, they provide very different possibilities for a left-handed student to be accommodated in different chair locations, proposing to use arrangement c) seen in figure 3.

It is also recommended to consider, according to anthropometric measurements, a more comfortable work table with the following measurements, table height-adjustable 64 centimeters-80 centimeters, table width 70 centimeters, table length 1.40 meters, table surface angle -adjustable, Max work surface thickness = 5 centimeters, minimum knee adjustment depth = 38 centimeters.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved. MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne. Factors in the classroom: Ergonomics and inclusion. ECORFAN Journal-Republic of Peru. 2020

Regarding environmental factors, the classroom necessarily requires artificial light and it is proposed to manage curtains that cover the windows that are on the left side of the room, as shown in figure 8, since the sunlight that enters through them causes glare and it impairs the student's visualization of the blackboard, instead of helping him.

Another recommendation is to place a false ceiling on the ceiling of the classrooms in general, or another material that is similar in effects, since it was observed through a tour of the classrooms that there is no type of ceiling that can reduce some of the noises such as: echoes, the noises caused by various causes, such as the students entering, external noises, such as perhaps a passing car, rain, students playing in the corridors and others, as shown in figures 9 and 10.



Figure 9 Current roof



Figura 10 Recommended ceiling with false ceiling

# References

Medina Á. y García M. (2010). Ser zurdo, una discapacidad para la educación técnica. Documento presentado en 25 Años de Integración Escolar en España: Tecnología e Inclusión en el ámbito educativo, laboral y comunitario. Murcia: Consejería de Educación, Formación y Empleo. Murcia, España.

Mondelo P., Torada E.G., González O., y Gómez Fernández M. (2000). *Ergonomía 1* (3a ed.). México D.F., México: Alfaomega.

Mondelo P., Torada E.G., González O., y Gómez Fernández M. (2000). *Ergonomía 4* (1ª ed.). México D.F., México: Alfaomega.

Ramírez C. (2000). *Ergonomía y Productividad* (1a ed.). México D.F., México: Limusa.

Reglamento Federal de Seguridad, Higiene y Medio Ambiente de Trabajo (1997). *Artículo* 2° *apartado V.* 1997. Recuperado de http://stps.gob.mx/bp/secciones/dgsst/normativi dad/n152.pdf

Salinas I., Negre F. y Manresa C. (2010). Procesos de innovación en atención a la diversidad: Análisis de las dimensiones a partir del diseño de pautas ergonómicas para el uso de recursos de apoyo para el acceso al ordenador.

Ponencia presentada en el XIII Congreso Internacional EDUTEC 2010: E-Learning 2.0: Enseñar y Aprender en la Sociedad del Conocimiento, Universitat Illes Balears. Illes Balears, España.

San Martín R. (2003). *Diseño de un aula informática-Manual de Luminotecnia* (1a ed.). Madrid. España: General de Ediciones Especializadas.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved. MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne. Factors in the classroom: Ergonomics and inclusion. ECORFAN Journal-Republic of Peru. 2020

# Cultural appreciation of the tradition of Judas in the municipality of Cuitlahuac, Veracruz

# Apreciación cultural de la tradición de Judas en el municipio de Cuitlahuac, Veracruz

BELLATO-GIL, Patricia Lyssette\*†, AGUIRRE-MORALES, Fabiola, MENDOZA-LOYO, Octavio Iván and CASTILLO-BLANCO, José Said

Universidad Tecnológica del Centro de Veracruz. Ave. Universidad 350 Carretera Federal Cuitláhuac-La Tinaja, Localidad Dos Caminos, Cuitláhuac, Ver

ID 1<sup>st</sup> Author: *Patricia Lyssette, Bellato-Gil* / **ORC ID**: 0000-0003-1851-1944, **Researcher ID Thomson**: X-3120-2018 and **CVU CONACYT ID**: 163879

ID 1<sup>st</sup> Coauthor: *Fabiola, Aguirre-Morales*/ **ORC ID**: 0000-0002-8212-1505, **Researcher ID Thomson**: X-2365-2018 and **CVU CONACYT ID**: 874345

ID 2<sup>nd</sup> Coauthor: *Octavio Iván, Mendoza-Loyo/* **ORC ID**: 0000-0001-6520-0562, **Researcher ID Thomson**: X-3079-2018 and **CVU CONACYT ID**: 856573

ID 3<sup>rd</sup> Coauthor: *José Said, Castillo-Blanco/* **ORC ID**: 0000-0002-4846-0693, **Researcher ID Thomson**: X-2368-2018 and **CVU CONACYT ID**: 893013

Received July 7, 2018; Accepted December 4, 2018

#### **Abstract**

The present paper Studied Cultural the valuation before to tradition That is shared from the dramatization or ritualization of the Christian story That Arises from an interesting stress Between the ancestral culture and the Catholic hegemony, Represented in a battle of good and evil, Which culture communicates values , and Which is Considered culturally expression of the municipality of Cuitlahuac, Veracruz called The Judas. In order to know the cultural the value of esta tradition in tourists visiting the municipality During Holy Week, a type of quantitative study was Carried out, the research design was descriptive and cross, an applicable instrument was created through a survey staff, Where the theoretical framework provided support for the design of the questionnaire. The integration of the results Obtained in the quantitative study allowed us to move from the identification of themes, constructs and categories to culture the valuation of esta tradition, contributing With This to Obtain reliable data That allow us to Identify the genre in Which culture the roots esta tradition of culture predominate.

Cultural valuation, Tradition, Tourist, Root

#### Resumen

El presente artículo estudia la valoración cultural ante una tradición que se comparte a partir de la dramatización o ritualización del relato cristiano que surge de una interesante tensión entre la cultura ancestral y la hegemonía católica, representada en una batalla del bien y el mal, que comunica valores de carácter cultural, y que es considerada una expresión cultural propia del municipio de Cuitláhuac, Veracruz denominada Los Judas. Con el objetivo de conocer la valoración cultural de dicha tradición en los turistas que visitan el municipio en Semana Santa, se llevó a cabo un tipo de estudio cuantitativo, el diseño de investigación fue descriptivo y transversal, se creó un instrumento aplicable a través de una encuesta personal, en donde el marco teórico proporcionó un apoyo para el diseño del cuestionario. La integración de los resultados obtenidos en el estudio cuantitativo permitió pasar de la identificación de temas, constructos y categorías a la valoración cultural de esta tradición, contribuyendo con esto a la obtención datos fidedignos que permiten identificar el género en el cual predomina el arraigo cultural de esta tradición.

Valoración cultural, Tradición, Turista, Arraigo

**Citation:** BELLATO-GIL, Patricia Lyssette, AGUIRRE-MORALES, Fabiola, MENDOZA-LOYO, Octavio Iván and CASTILLO-BLANCO, José Said Cultural appreciation of the tradition of Judas in the municipality of Cuitlahuac, Veracruz. ECORFAN Journal-Republic of Peru. 2020. 6-8:22-30

<sup>\*</sup> Correspondence to Author (email: lyssett.bellato@utcv.edu.mx)

<sup>†</sup> Researcher contributing first author.

### Introduction

Globally, culture has generated a growing movement of tourists in order to gain new and unique experiences. According to the barometer of the World Tourism Organization, UNWTO (2017), Mexico and eighth in tourism reception, it received more than thirty million tourists in 2017 which based the last study by the Center for Advanced Study in tourism, CESTUR (2017), it is estimated that cultural tourism in Mexico totaled 187 million pesos, and at least 70 million tourists perform activities related to culture; hence the strategic importance of the feasibility study for the segment of cultural tourism, by CESTUR in 2017 in the country, identified 811 places of interest for the development of tourism related to culture.

The of Veracruz Mexican state represents an important cultural due to miscegenation and historical legacy distributed in its 212 municipalities, which have particular celebrations from beliefs and traditions related to the syncretism of ways of thinking and dancistic manifestations. In defining the study of this research in the municipality of Cuitlahuac, the tradition of Judas was identified as the principal cultural element that triggers the visit of people to the municipality in the period of Easter, hence the aim of this work to learn the valuation of tourists regarding this cultural event, which is unique in the central territory of the state, corresponding to the tourist region of high mountains and agrees that holiday period.

From the identified central issue: Is there a relationship between the cultural value of the tradition of Judas and the tourist influx to the municipality of Cuitlahuac, Veracruz in times of Easter? he reached the following two scenarios: 1. If the tradition of Judas is represented by men, there is more deeply rooted in men than in women. 2. If tourists visit Cuitláhuac Easter is because they are aware of the tradition of Judas.

Literature review, general of the municipality of Cuitlahuac, contextualization, applied methodology, results and conclusions: As a result of this research, this article, which contains scientific methodological structure under the following items are generated.

# Literature review

Culture for protection has been part of the interest of some governments and cultural groups around the world, however, the current approach has taken this issue is the valuation primarily from the community not to alter the distinctive features that give identity to the same.

In Chile, Basaez (2014) developed a study of the municipality of La Florida, which reflects a municipal interest to come to the arts to every corner of the territory, however, research shows that the municipality has failed to make this aspiration a reality. To achieve the objective, according to the author of this research, the municipality together with the managers should propose some goals, assuming the commitment to culture and feeling part of this action.

In Colombia, Larrain (2017) takes as its starting point an ethnography conducted between 2015 and 2016, this research provides a description of the elements of the scene of artistic and cultural manifestations of Afrodescendant community in the municipality of Girardot, Antioquia. According to research, the author concludes that there is an inseparable link between community participation in political and community organizing scenarios, and ethnicity attributed to its artistic and cultural events.

In the studied community, is not a process of acculturation, but resignification<sup>1</sup> the existence of an Afro-descendant community, beyond their physical characterization, by ways of expressing themselves through art, in a territory that identify as their own.

Based on the research developed by Abeledo, Coll, & Rausell, (2016), cultural and creative activities are a factor of increasing relevance for the development of territories. Competitiveness in times of globalization requires public policies that promote social and economic innovation. This phenomenon positions culture and creativity at the center of regional and local development strategies.

<sup>1</sup> **resignification:** giving a new meaning about the prevailing culture in place.

According to Marujo (2015), cultural events promote dialogue, create feelings and mark an identity. With globalization, countries and regions have increasingly developed cultural events to celebrate their history and culture.

The motivations to participate in an event vary according to the regions visited, the type of party or festival, the type of tourists and socio-demographic and cultural variables. This article aims to identify the main motivation of tourists to participate in the New Year's Eve Party in Madeira Island. To reach the objective, a sample survey was chosen for convenience and direct and participant observation was made. The results showed that the main motivation for tourists to visit the event for the first time is associated with knowledge and experimentation of the culture of the party.

According to the study made Aparecido (2014) named: the parties strategies for implementation of the tourist activity with local base; local tourism appears as a modality interested in cultural, social and political elements with the concern of improving the quality of life of the visited population. He is also interested in the interaction between these elements and visitors. Therefore, this form of tourism is easily associated with proposals for rural territorial development, which can increase the income of local inhabitants. The festival is one of its instruments capable of offering culture as a commodity that is consumed, which favors the interactions among those present, adding value to the products and reaffirming the local culture.

In the Mexican state of Veracruz, Madrazo (2008) describes some aspects of the patronal feast in Santa María Magdalena in Xico, Veracruz, particularly the indigenous cultural elements incorporated into the festive culture of the country under the terms "oral tradition". In addition to confirming their presence of these cultural elements, it is observed that they are hidden more and more, it can even be thought that their transformation points in several cases towards their loss or oblivion. The work was focused in particular on the floral arc and the myth-narration of Juan del Monte and the experiences of identity generated by the stories about the image of Saint Mary Magdalene.

# Overview of the municipality of Cuitláhuac, Veracruz

According to information from the National Institute of Statistics and Geography, INEGI (2010) the municipality of Cuitláhuac is located in the center of the state of Veracruz, is located between the parallels 18  $^{\circ}$  42' and 18  $^{\circ}$  51' north latitude; meridians 96  $^{\circ}$  28' and 96  $^{\circ}$  47' west longitude; altitude between 140 and 500 meters above sea level. It borders to the north with the municipalities of Yanga, Atoyac, Paso del Macho and Carrillo Puerto; to the east with the municipalities of Carrillo Puerto, Cotaxtla and Blanca; to the south with municipalities of Tierra Blanca, Omealca and Cuichapa; to the west with the municipalities of Cuichapa and Yanga.

Physiographically it is located in the province of the Coastal Plain of the South Gulf, and in the subprovince of the Coastal Plain of Veracruz; thus manifesting a system of topoforms of typical hills (76%), alluvial plain with hills (15%) and hillslope valley (9%); its climate is warm subhumid with rain in summer, with higher humidity (84%), warm subhumid with rain in summer, higher humidity (14%) and hot humid with abundant rainfall in summer (2%). The temperature range is from 24 ° to 26 ° and the precipitation range from 1400 to 200 mm.

Cuitláhuac means "dissected aquatic seaweed". Cuitláhuac was the penultimate king of Tenochtitlan, brother of Moctezuma, reigned 80 years until the smallpox, disease introduced by the Europeans was the cause of his death.

In the year of 1580 to 1590, this population originated, and they called it the tip. Later came families from different places and took the name of San Juan for the parish, dedicating it to San Juan Bautista as patron saint of the place. In 1820 the great haciendas were formed. After the revolution arose the parcels and congregations that gave origin to this municipality.

On August 12, 1932, the name of San Juan de la Punta was changed to Cuitláhuac, in honor of the penultimate Aztec king. In the year of 1946 it was declared a village. And later on December 30, 1973 when the Mexican commercial bank Cuitláhuac was inaugurated, it was elevated to the city category.

### Contextualization

#### **Society**

According to data from INEGI (2010), the total population of the municipality of Cuitláhuac is 28,956 inhabitants, which is distributed in 13,870 men corresponding to 47.90%, while 15.086 women correspond to 52.09% of the population. Infant 7,457 (0-14), young and adult 18, 065 (15-64), third age 2,395 (65 and over). The degree of marginalization is medium, the population in extreme poverty is 12.5% Population in indigenous households is 463. The social educational development from 2014 to 2015 is reflected in 74 schools, 486 teachers that serve a total of 10,440 students. The people who know how to read and write are from the age of 6 to 14 years, which represents 86.5 percent of the population and 8.1 percent are illiterate people. The services that Cuitláhuac has are drainage, piped water, electric power, disposition of goods and information and communication technologies.

Cuitláhuac has 37 locations, being some favorable for tourism development.

# **Economy**

According to INEGI data, in the state of Veracruz the Global Indicator of Economic Activity (IGAE) grew by 0.7 percent in real terms during February 2018 compared to the previous month, with seasonally adjusted figures and 2.3% with respect to the month of February 2017. The increase in the economy is generated mainly by tertiary activities or services including tourism, being this favorable for those municipalities that have natural and cultural wealth to offer tourists.

The municipality of Cuitláhuac at the end of June 2010, according to INEGI data, had an economically active population of 10,190 people. Of which 7,136 were men and 3,054 women, the above expressed as a percentage represents 50.18% as economically active. It is noteworthy that within the primary sector the activity that stands out is agriculture and among the main crops are sugar cane and lemon, within the secondary sector the activity that stands out is the sugar industry and for the tertiary sector the trade it is the predominant activity.

In economic matters the municipality of Cuitláhuac develops strategies with the objective of having an alignment to the axes of development of the state of Veracruz for it the actions that are proposed through the municipal plan of development 2014-2017, are to improve the communication channels Through the improvement of the roads that connect the localities, rural development seeks to equip small producers and improve agricultural products, improve the quality of life of the inhabitant in poverty through productive options, establish programs federal and state that promote the productive development of the inhabitants, innovate crops in relation to soil develop infrastructure the types, for effectiveness of agricultural activities, promote creation and strengthening businesses.

Cuitláhuac is one of the participatory economies of the state of Veracruz, since in said municipality according to data from the Mexican Business Information System SIEM (20109),342 establishments registered, among them Persian lemon packing plants such as Empacadora Jugresa, Costa de Veracruz, Limones, SA de CV Exportadora Martínez produces, SA de CV López Mora Citrus Packer, among others, as well as the San Antonio Poultry Farm, the multinational processed food Ab Mauri, Coppel Stores and Bodega Aurrera.

#### Culture

# **Tourist and Cultural Attractions:**

According to information obtained in the Tourist Guide Mexico (2018), in Cuitláhuac there are elements that represent part of the history of the pre-Hispanic evidences municipality as corresponding to the Totonac culture. architectural buildings such as the municipal palace, the ex hacienda of Trapiche Meza, or Estancia de la punta, the temple of the school of the Cross and the main temple in honor of the patron saint San Juan Bautista, which is celebrated from June 22 to 24 with a popular religious festival with music and danzón in the squares, celebration that takes by name Fair San Juan.

In November, on the 1st and 2nd, the day of the dead is celebrated with a sample of offerings in the main concourse.

On October 12, the day of the race is celebrated with the traditional comparsa of La Murga, which consists of representing the municipality's people with popularity, as well as politicians, singers and celebrities nationally and internationally; on December 12 the Virgin of Guadalupe is celebrated and in the month of April the Holy Week where the maximum cultural festival corresponding to the tradition of Judas prevails.

For more than 150 years the tradition of the comparsa of Judas has been carried out in the municipality of Cuitláhuac, Veracruz, during the Holy Week, the preparation to arrive at this date every year begins from the month of February, where they are registered the participants and they are made together for the organization, as well as the elaboration of costumes. There are more than 300 members and within the comparsa there are 3 characters according to the rank: the lowest rank are the Jews who wear a very cheerful outfit with knee-length pants of different colors and topped with bells, wearing white mask and hat. brightly colored Chinese paper flowers, carry a long garrocha adorned with multi-colored Chinese paper fringe and these represent the Roman soldiers who arrested Jesus at that time. The Kings are more solemn and wear a luxurious dress, they emit flashes of colors, they carry symbols of power and authority, their crown describes the royalty and the chicote their authority, they make reference to their identity with the name they wear on their cloak and thus he manifests his power openly to be obeyed. Los Diablos represents evil and his face is covered with a black mask with large ixtle mustaches as well as a hat with horns, they use a long tail and a chirrión with which they threaten and hit the ground producing a frightening sound and represent Judas Iscariote; the chirrion is the rope with which he hung himself after the betrayal of Jesus.

### **Turismo**

The municipality has three caves in the foothills of the hill of San Juan de la Punta, called "Water Room, Green Room and Dry Room", in the water room crosses a river of cold water that comes from Atoyac; the water room connects with the green room that is a small cave and this in turn connects with the dry room that is the largest grotto where an ecosystem of bats is located. Tourist Guide Mexico (2018). Another attraction is the Monument to Cuitláhuac in memory of the penultimate Aztec emperor.

Another attraction is the Parish of San Juan Bautista, located in the center of the city, which has been the Catholic ceremonial center in which a large part of the population of this municipality has congregated. Over the years, several modifications were made to both its façades and its interior. Starting with a small chapel to what is now the parish. The mobile stone, it is said can be moved with just one finger. Legend has it that the place where the two large rocks are now, (one of them whose weight is estimated at at least 20 tons), came a couple (male and female) compadres who were unfaithful to their partners; this pair in a Catholic tour were left behind and when they returned to look for them they only found these stones, because a supernatural power petrified them as punishment for the forbidden act. Alfonso Medellin Zenil (1957) wrote about invocations of Ouetzalcoatl, taking previously published information by chroniclers and travelers, where it is related that when Ouetzalcoatl in his exile was close to the sea, he made several prodigies, one of them related to a moving stone, which It had been recorded by Dupaix on his trip in the early nineteenth century. Medellín Zenil locates it in the vicinity of Cuitláhuac, before San Juan de la Punta, Medellín, Z. (1957).



**Figura 1** Vestimenta de los judas en el municipio de Cuitláhuac. Fuente: imagen propia

# Metodología

In order to know the cultural value of the tradition of Judas in tourists visiting the town of Cuitlahuac, Veracruz, Easter, he proposed a type of study, quantitative, in order to know the roots and traditions of the same. The research design was chosen depending on the objectives of Mc projectt. Daniel & Gates (2005).

The method for data collection was through surveys. Survey research is descriptive by nature, she interacted with respondents to determine facts, opinions and cultural assessments of the tradition of Judas, using a questionnaire to have an orderly and structured approach in collecting Mc data. Daniel & Gates (2005).

In quantitative research design type descriptive cross-sectional research was designed an instrument applicable through a personal interview, where the theoretical framework provided support for the design of the questionnaire was considered.

The variables were subsumed into 5 groups: a) culture, knowledge of tradition, b) use of tourist services, c) spending as a tourist, d) origin of tourists e) knowledge of the tourist attractions of the municipality. Integrating the results of the quantitative study allowed to move from identifying issues, constructs and categories to the cultural value of this tradition.

The sampling was part of the research design, and it was proposed to use quota sampling which were cataloged by tourists, gender and age, being implemented in the municipality of Cuitlahuac. Population or population of interest which the sample was taken, were tourists at the time of gathering information were visiting Easter in the municipality, which belonged to the age group of 18 and older and to provide information contribute to this research, carried a cross sectional study to 200; This sample size was obtained applying the formula proportions, with a confidence level of 95% and an error of 7%,

Data analysis was done using the Statistical Package for the Social Science (SPSS).

# **Validity**

Gather information that allows drawing conclusions for research is a fundamental part of the study, however, it is necessary that the instrument is valid, which is observed when measured that to which it is intended. The problem of specifying the validity of the measurement instrument comes from the fundamental definition of validity, which refers to the extent that the instrument "seems to be" measuring the characteristic of interest Weiers (1986).

Construct validity is provided that the measure has a particular concept relates to measures related concepts in a theoretical manner provided Weiers (1986). To the extent that there is a concept, it is possible to measure various methods, which is foundation of convergent validity, it is observed when the results achieved by two or more independent technical "converge" into a single numerical value, the presence of convergent validation help substantiate the claim that the findings were not mere accident or fortuitous events. Reliability is the extent to which the measure of a variable is free of random error and therefore provides consistent results. A research method is reliable if it provides virtually identical results in all cases where investigation is repeated; a method measuring the reliability of a measurement is the determination of its internal consistency Santesmases (2005). the presence of convergent validation help substantiates the claim that the findings were not mere accident or fortuitous events. Reliability is the extent to which the measure of a variable is free of random error and therefore provides consistent results.

A research method is reliable if it provides virtually identical results in all cases where the investigation is repeated; a method for measuring the reliability of a measurement is the determination of its internal consistency Santesmases (2005). the presence of convergent validation help substantiates the claim that the findings were not mere accident or fortuitous events. Reliability is the extent to which the measure of a variable is free of random error and therefore provides consistent results. A research method is reliable if it provides virtually identical results in all cases where the investigation is repeated; a method measuring the reliability of a measurement is the determination of its internal consistency Santesmases (2005). A research method is reliable if it provides virtually identical results in all cases where the investigation is repeated; a method for measuring the reliability of a measurement is the determination of its internal consistency Santesmases (2005). A research method is reliable if it provides virtually identical results in all cases where the investigation is repeated; a method measuring the reliability of a measurement is the determination of its internal consistency Santesmases (2005).

The internal consistency of the survey was estimated by the coefficient alpha ( $\alpha$ ) Cronbach, wherein the value of  $\alpha$  tends to increase as the number of items of the scale increases, this ratio usually varies between 0 and 1, although you can take negative values when items are correlated precisely negatively, in these cases, the assumption of additivity of the scale is not met and the coefficient is not a good index of reliability, so that if you were to get a negative value it should be void. The Cronbach's alpha value obtained was 0.85, indicating good internal consistency, ie, the scale measures the appropriate phenomenon for research purposes, Santesmases (2005).

### **Methods of Analysis**

Was carried out a unidirectional tab, whereby research results were obtained, allowing profiling respondents sample, identifying the characteristics that distinguish them as groups, the percentage respond differently to different aspects expressed adhering a frequency table and percentages for each survey question it was developed. Hair; Babin; Black & Anderson, (2010).

In order to simultaneously compare two or more nominal variables were conducted Crosstabs, which is a statistical technique by hich a double entry table is obtained, also called contingency table in which values are presented joint frequencies of the variables, showing the relationship between them, Santesmases (2005). A hypothesis is an unproven assertion of a phenomenon, the behavior of one or more variables or the relationship between two or more variables, they show what they are looking for and anticipate the possible answers to the questions raised in the investigation, Santesmases (2005), the results of the study will have to confirm or reject the hypothesis.

Hypotheses were proposed on the characteristics of the population based on the sample data, the process began with the calculation of frequencies and percentages for there really test the hypothesis, being a purpose of cross-tabulations studying the relationships between variables.

The purpose of hypothesis testing is not to question the calculated value of the sample statistic, but to make a judgment about the difference between two sample statistics, but to make a judgment about the difference between two sample statistics or between the statistical sample and a parameter of the population for which made the Aaker (2001) hypothesis.

It was established beforehand a significance level of 0.05, which means that the probability of incorrectly rejecting the null hypothesis when it were true would be effective less than 5 times in 100 Hair, et al., (2010) allowed take out the statistical test and determine the answer to the research questions.

#### **Results**

Based on applied for data collection tool the following results were obtained:

	Knowledge of tradition (Through)						
Gender	TV / WEB	Newspapers magazines	family				
Female	twenty-one 2. 3%	33.29%	6773.62	91			
Male	2522.9%	54.58	7972.47	109			

Table 1 Gender / traditions.

Source: self made

Table 1 shows that 72.47% of men and 73.62% of women surveyed are aware of the tradition for their family, so it generates more interest in them.

	ages			Total
Gender	18-30	31-45	46-60	
Female	3841.75%	2729.67%	26	91
			28.57	
Male	4944.95	4036.6%	twenty	109
			18.34%	

**Table 2** Gender / age. *Source: self made* 

Table 2 shows that tourists polled 44.95% of men between 18 to 30 and 41.75% are women.

	Use of tourist services				
Gender	hotel	Department	Food and	Tota	
Gender			Beverage	1	
			Establishments		
Female	17	6	68	91	
	18.68	6.59%	74.72%		
	%				
Male	18	8	83	109	
	16.51	7.33%	76.14%		
	%				

 Table 3 Gender / use of tourist services

Source: self made.

The use of tourist services has a major impact on local food and beverages, both men with 76.14% and females with 74.72%, which are used during the stay of tourists in the city, followed by lodging establishments where hotels are preferred by tourists, 16.51% and 18.68% in men and women.

	Average	spending			
Gender	Under	500-	1500-	More	Total
Gender	500	1500	2500	than	Total
				2500	
Female	4	33	31	2. 3	91
	4.39%	36.26%	34.06%	25.27%	
Male	30	41	22	16	109
	27.52%	37.61%	20.18%	14.67%	

Table 4 Gender / average expenditure

Source: self made

Table 4 shows the average expenditure that has the tourist visiting shows, reflecting the 36.26% of women have an average spending between 500 and 1,500 pesos, and with respect to men's 37.61% had the same average spending. We proceeded to carry out two tests of hypotheses, same that were made by Chi square. It was intended to see the possible relationship between age and gender with 5% of significance, concluding that there is no relationship between the variables related.

The other hypothesis test was carried out to analyze the possible relationship between gender and knowledge variable traditions, also it found that there is no relationship between these variables.

# **Conclusions**

It is noted that tourists visiting during Easter the town of Cuitlahuac, Veracruz, both men and women do in the knowledge that during those days carried out the development of the tradition of Judas, it transcends generations, knowledge thereof by the oral account given among relatives, who have seen and some witnessed over the years the evolution of cultural manifestation is mostly acquired. It is important to mention that almost half of the tourists visiting Cuitláhuac at that time both for men and women aged between 18 to 30 years and 41.75% are women, with this you can conclude that it is arousing interest among young people.

The food and beverage establishments are the ones that benefit the most from the tourists that visit the place due to this tradition. 70.32% of women spend between 500 and 2,500 pesos, while men spend less than 500 and up to 1,500, being able to observe that women spend the most during this visit to Cuitláhuac. During this tradition, it is men who have an active participation, for which reason it is hypothesized that men have more knowledge than women, when testing this hypothesis, it is obtained as a result that there is no relationship between these variables, that is, both Men and women alike know this tradition.

It is also obtained that there is no relationship between age and gender with respect to knowledge of this tradition. It is suggested to carry out a marketing strategy that invites tourists to visit this municipality, making known the historical importance of the Judas tradition in nearby municipalities, schools and tourist offices, as attractions of the municipality. The recognition of the tradition as cultural heritage of the state of Veracruz before the Secretariat of Tourism, (SECTUR) is sought. It is recommended that families with roots in this municipality continue to promote this tradition through oral accounts within the family members, mainly with those who are residing outside Cuitláhuac, extending the invitation to friends and neighbors.

#### References

Aaker, D. (2001). Strategic Market Management. Wiley .

Abeledo, R., Coll, V., & Rausell, P. (2016). La cultura como factor de innovación socioeconómica en el medio rural: el caso del clúster de artesanía artística de La Città Europea dei Mestieri d'Arte (CITEMA). Revista de Estudios sobre Despoblación y Desarrollo Rural.

Aparecido, E. (2014). La fiesta como estrategias de implementación de la actividad turística con base local .

Basáez, R. (2014). El municipio como alero de la gestión cultural barrial. Obtenido de Una mirada a la gestión cultural municipal de La Florida:

http://repositorio.uchile.cl/bitstream/handle/225 0/116830/RICARDO%20BASAEZ%20%28De finitivo%29.pdf?sequence=4&isAllowed=y

Centro de Estudio Superiores en Turismo . (2017). Foro Nacional de Turismo y Cultura Kultur 2017. Obtenido de https://www.publimetro.com.mx/mx/estilovida/2017/04/07/concluye-kultur-2017.html

Guía Turística México . (2018). Cuitláhuac Obtenido de http://www.guiaturisticamexico.com/municipio.php?id\_e=30&id\_Municipio=01126

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate Data Analysis. Pearson.

Instituto Nacional de Estadística Geografía e Informática. (2017). Sistema de Información Municipal . Obtenido de http://ceieg.veracruz.gob.mx/wp content/uploads/sites/21/2016/05/Cuitlahuac.pd f

Instituto Nacional de Estadística y Geografía. (2010).

Larraín, A. (2017). Manifestaciones artísticas y culturales afrocolombianas. Obtenido de Una aproximación al caso de Girardota (Antioquía): http://www.redalyc.org/pdf/3251/32515207600 5.pdf

Madrazo, M. (2008). La fiesta patronal de Xico, Veracruz. Tradición oral y festividad. Obtenido de

http://www.redalyc.org/pdf/104/10415102.pdf

Marujo, N. (2015). Eventos culturales y motivaciones de los turistas. La Fiesta de Fin de Año en Isla de Madeira - Portugal. Estudios y Perspectivas en Turismo, 40-55.

Mc. Daniel, C., & Gates, R. (2005a). Investigación de Mercados. México: Thomson.

Medellín Zenil, A. (s.f.). La Deidad Ehécatl-Quetzacóatl en el Centro de Veracruz. (Universidad Veracruzana, Ed.) La palabra y el hombre, 45-49.

Organización Mundial del Turismo . (2017). Asciende México al 8° lugar en el ranking de países más visitados . Obtenido de https://www.gob.mx/sectur/prensa/asciende-mexico-al-8-lugar-en-el-ranking-de-paises-mas-visitados-de-la-organizacion-mundial-de-turismo

Santesmases, Mestre , M. (2005). Diseño y análisis de encuestas en investigación social y de mercados. Madrid: Piramide.

Weiers, R. (1986). Investigación de Mercados. México: Prentice-Hall Hispanoamericana.

# Instructions for Scientific, Technological and Innovation Publication

# [Title in Times New Roman and Bold No. 14 in English and Spanish]

Surname (IN UPPERCASE), Name 1<sup>st</sup> Author†\*, Surname (IN UPPERCASE), Name 1<sup>st</sup> Coauthor, Surname (IN UPPERCASE), Name 2<sup>nd</sup> Coauthor and Surname (IN UPPERCASE), Name 3<sup>rd</sup> Coauthor

Institutional Affiliation of Author including Dependency (No.10 Times New Roman and Italic)

ID 1<sup>st</sup> author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1<sup>st</sup> author: (Scholar-PNPC or SNI-CONACYT) (No.10 Times New Roman)

ID 1<sup>st</sup> coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1<sup>st</sup> coauthor: (Scholar or SNI) (No.10 Times New Roman)

ID  $2^{nd}$  coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU  $2^{nd}$  coauthor: (Scholar or SNI) (No.10 Times New Roman)

ID 3<sup>rd</sup> coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 3<sup>rd</sup> coauthor: (Scholar or SNI) (No.10 Times New Roman)

(Report Submission Date: Month, Day, and Year); Accepted (Insert date of Acceptance: Use Only ECORFAN)

Abstract (In English, 150-200 words)

Abstract (In Spanish, 150-200 words)

Objectives Objectives
Methodology
Contribution Contribution

Keywords (In English) Keywords (In Spanish)

Indicate 3 keywords in Times New Roman and Bold No.

Indicate 3 keywords in Times New Roman and Bold No.

10

**Citation:** Surname (IN UPPERCASE), Name 1st Author†\*, Surname (IN UPPERCASE), Name 1st Coauthor, Surname (IN UPPERCASE), Name 2nd Coauthor and Surname (IN UPPERCASE), Name 3rd Coauthor. Paper Title. ECORFAN Journal-Republic of Peru. Year 1-1: 1-11 [Times New Roman No.10]

<sup>\*</sup> Correspondence to Author (example@example.org)

<sup>†</sup> Researcher contributing as first author.

# Instructions for Scientific, Technological and Innovation Publication

#### Introduction

Text in Times New Roman No.12, single space.

General explanation of the subject and explain why it is important.

What is your added value with respect to other techniques?

Clearly focus each of its features

Clearly explain the problem to be solved and the central hypothesis.

Explanation of sections Article.

# Development of headings and subheadings of the article with subsequent numbers

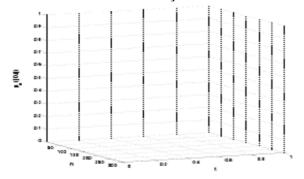
[Title No.12 in Times New Roman, single spaced and bold]

Products in development No.12 Times New Roman, single spaced.

# Including graphs, figures and tables-Editable

In the article content any graphic, table and figure should be editable formats that can change size, type and number of letter, for the purposes of edition, these must be high quality, not pixelated and should be noticeable even reducing image scale.

[Indicating the title at the bottom with No.10 and Times New Roman Bold]



**Graphic 1** Title and *Source (in italics)* 

Should not be images-everything must be editable.

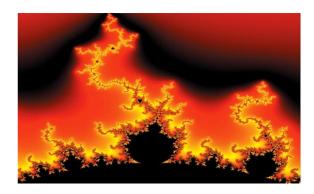


Figure 1 Title and Source (in italics)

Should not be images-everything must be editable.

**Table 1** Title and *Source (in italics)* 

Should not be images-everything must be editable.

Each article shall present separately in **3 folders**: a) Figures, b) Charts and c) Tables in .JPG format, indicating the number and sequential Bold Title.

# For the use of equations, noted as follows:

$$Y_{ij} = \alpha + \sum_{h=1}^{r} \beta_h X_{hij} + u_j + e_{ij}$$
 (1)

Must be editable and number aligned on the right side.

# Methodology

Develop give the meaning of the variables in linear writing and important is the comparison of the used criteria.

# Results

The results shall be by section of the article.

# **Annexes**

Tables and adequate sources thanks to indicate if were funded by any institution, University or company.

# **Conclusions**

Explain clearly the results and possibilities of improvement.

# **Instructions for Scientific, Technological and Innovation Publication**

#### References

Use APA system. Should not be numbered, nor with bullets, however if necessary numbering will be because reference or mention is made somewhere in the Article.

Use Roman Alphabet, all references you have used must be in the Roman Alphabet, even if you have quoted an Article, book in any of the official languages of the United Nations (English, French, German, Chinese, Russian, Portuguese, Italian, Spanish, Arabic), you must write the reference in Roman script and not in any of the official languages.

# **Technical Specifications**

Each article must submit your dates into a Word document (.docx):

Journal Name
Article title
Abstract
Keywords
Article sections, for example:

- 1. Introduction
- 2. Description of the method
- 3. Analysis from the regression demand curve
- 4. Results
- 5. Thanks
- 6. Conclusions
- 7. References

Author Name (s) Email Correspondence to Author References

# **Intellectual Property Requirements for editing:**

- -Authentic Signature in Color of <u>Originality</u> <u>Format</u> Author and Coauthors
- -Authentic Signature in Color of the <u>Acceptance</u> <u>Format</u> of Author and Coauthors

# **Reservation to Editorial Policy**

ECORFAN Journal Republic of Peru reserves the right to make editorial changes required to adapt the Articles to the Editorial Policy of the Journal. Once the Article is accepted in its final version, the Journal will send the author the proofs for review. ECORFAN® will only accept the correction of errata and errors or omissions arising from the editing process of the Journal, reserving in full the copyrights and content dissemination. No deletions, substitutions or additions that alter the formation of the Article will be accepted.

# **Code of Ethics - Good Practices and Declaration of Solution to Editorial Conflicts**

Declaration of Originality and unpublished character of the Article, of Authors, on the obtaining of data and interpretation of results, Acknowledgments, Conflict of interests, Assignment of rights and Distribution.

The ECORFAN-Mexico, S.C Management claims to Authors of Articles that its content must be original, unpublished and of Scientific, Technological and Innovation content to be submitted for evaluation.

The Authors signing the Article must be the same that have contributed to its conception, realization and development, as well as obtaining the data, interpreting the results, drafting and reviewing it. The Corresponding Author of the proposed Article will request the form that follows.

#### Article title:

- The sending of an Article to ECORFAN Journal Republic of Peru emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Format of Originality for its Article, unless it is rejected by the Arbitration Committee, it may be withdrawn.
- None of the data presented in this article has been plagiarized or invented. The original data are clearly distinguished from those already published. And it is known of the test in PLAGSCAN if a level of plagiarism is detected Positive will not proceed to arbitrate.
- References are cited on which the information contained in the Article is based, as well as theories and data from other previously published Articles.
- The authors sign the Format of Authorization for their Article to be disseminated by means that ECORFAN-Mexico, S.C. In its Republic of Peru considers pertinent for disclosure and diffusion of its Article its Rights of Work.
- Consent has been obtained from those who have contributed unpublished data obtained through verbal or written communication, and such communication and Authorship are adequately identified.
- The Author and Co-Authors who sign this work have participated in its planning, design and execution, as well as in the interpretation of the results. They also critically reviewed the paper, approved its final version and agreed with its publication.
- No signature responsible for the work has been omitted and the criteria of Scientific Authorization are satisfied.
- The results of this Article have been interpreted objectively. Any results contrary to the point of view of those who sign are exposed and discussed in the Article.

# **Copyright and Access**

The publication of this Article supposes the transfer of the copyright to ECORFAN-Mexico, SC in its Holding Republic of Peru for its ECORFAN Journal Republic of Peru, which reserves the right to distribute on the Web the published version of the Article and the making available of the Article in This format supposes for its Authors the fulfilment of what is established in the Law of Science and Technology of the United Mexican States, regarding the obligation to allow access to the results of Scientific Research.

#### Article Title:

Name and Surnames of the Contact Author and the Coauthors	Signature
1.	
2.	
3.	
4.	

# Principles of Ethics and Declaration of Solution to Editorial Conflicts

# **Editor Responsibilities**

The Publisher undertakes to guarantee the confidentiality of the evaluation process, it may not disclose to the Arbitrators the identity of the Authors, nor may it reveal the identity of the Arbitrators at any time.

The Editor assumes the responsibility to properly inform the Author of the stage of the editorial process in which the text is sent, as well as the resolutions of Double-Blind Review.

The Editor should evaluate manuscripts and their intellectual content without distinction of race, gender, sexual orientation, religious beliefs, ethnicity, nationality, or the political philosophy of the Authors.

The Editor and his editing team of ECORFAN® Holdings will not disclose any information about Articles submitted to anyone other than the corresponding Author.

The Editor should make fair and impartial decisions and ensure a fair Double-Blind Review.

### Responsibilities of the Editorial Board

The description of the peer review processes is made known by the Editorial Board in order that the Authors know what the evaluation criteria are and will always be willing to justify any controversy in the evaluation process. In case of Plagiarism Detection to the Article the Committee notifies the Authors for Violation to the Right of Scientific, Technological and Innovation Authorization.

# **Responsibilities of the Arbitration Committee**

The Arbitrators undertake to notify about any unethical conduct by the Authors and to indicate all the information that may be reason to reject the publication of the Articles. In addition, they must undertake to keep confidential information related to the Articles they evaluate.

Any manuscript received for your arbitration must be treated as confidential, should not be displayed or discussed with other experts, except with the permission of the Editor.

The Arbitrators must be conducted objectively, any personal criticism of the Author is inappropriate.

The Arbitrators must express their points of view with clarity and with valid arguments that contribute to the Scientific, Technological and Innovation of the Author.

The Arbitrators should not evaluate manuscripts in which they have conflicts of interest and have been notified to the Editor before submitting the Article for Double-Blind Review.

# **Responsibilities of the Authors**

Authors must guarantee that their articles are the product of their original work and that the data has been obtained ethically.

Authors must ensure that they have not been previously published or that they are not considered in another serial publication.

Authors must strictly follow the rules for the publication of Defined Articles by the Editorial Board.

The authors have requested that the text in all its forms be an unethical editorial behavior and is unacceptable, consequently, any manuscript that incurs in plagiarism is eliminated and not considered for publication.

Authors should cite publications that have been influential in the nature of the Article submitted to arbitration.

# **Information services**

## **Indexation - Bases and Repositories**

RESEARCH GATE (Germany)
GOOGLE SCHOLAR (Citation indices-Google)
REDIB (Ibero-American Network of Innovation and Scientific Knowledge- CSIC)
MENDELEY (Bibliographic References Manager)

# **Publishing Services**

Citation and Index Identification H
Management of Originality Format and Authorization
Testing Article with PLAGSCAN
Article Evaluation
Certificate of Double-Blind Review
Article Edition
Web layout
Indexing and Repository
ArticleTranslation
Article Publication
Certificate of Article
Service Billing

# **Editorial Policy and Management**

1047 La Raza Avenue -Santa Ana, Cusco-Peru. Phones: +52 1 55 6159 2296, +52 1 55 1260 0355, +52 1 55 6034 9181; Email: contact@ecorfan.org www.ecorfan.org

#### **ECORFAN®**

**Chief Editor** 

SUYO-CRUZ, Gabriel. PhD

**Executive Director** 

RAMOS-ESCAMILLA, María. PhD

**Editorial Director** 

PERALTA-CASTRO, Enrique. MsC

**Web Designer** 

ESCAMILLA-BOUCHAN, Imelda. PhD

Web Diagrammer

LUNA-SOTO, Vladimir. PhD

**Editorial Assistant** 

REYES-VILLAO, Angélica. BsC

**Translator** 

DÍAZ-OCAMPO, Javier. BsC

**Philologist** 

RAMOS-ARANCIBIA, Alejandra. BsC

**Advertising & Sponsorship** 

(ECORFAN® Republic of Peru), sponsorships@ecorfan.org

#### **Site Licences**

03-2010-032610094200-01-For printed material ,03-2010-031613323600-01-For Electronic material,03-2010-032610105200-01-For Photographic material,03-2010-032610115700-14-For the facts Compilation,04-2010-031613323600-01-For its Web page,19502-For the Iberoamerican and Caribbean Indexation,20-281 HB9-For its indexation in Latin-American in Social Sciences and Humanities,671-For its indexing in Electronic Scientific Journals Spanish and Latin-America,7045008-For its divulgation and edition in the Ministry of Education and Culture-Spain,25409-For its repository in the Biblioteca Universitaria-Madrid,16258-For its indexing in the Dialnet,20589-For its indexing in the edited Journals in the countries of Iberian-America and the Caribbean, 15048-For the international registration of Congress and Colloquiums. financingprograms@ecorfan.org

# **Management Offices**

1047 La Raza Avenue -Santa Ana, Cusco-Peru.

# ECORFAN Journal-Republic of Peru

"The learner's self-regulation and academic success"

TEJERO-MENA, Paulo, CUEVAS-SOSA, Jorge and VERA-CHI, Lucely

Universidad Tecnológica Regional del Sur

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

HERNÁNDEZ-CRUZ, María Guadalupe, VARGAS-GUTIERREZ, Luis Daniel and ROMERO-ROJAS, Ruth Marcela

Universidad Tecnológica Fidel Velazquez

"Factors in the classroom: Ergonomics and inclusion"

MARTÍNEZ, María Teresa, MONTOYA, Javier and SÁNCHEZ, Bertha Ivonne

Ingeniería Mecatrónica del Tecnológico de Jiménez

"Cultural appreciation of the tradition of Judas in the municipality of Cuitlahuac, Veracruz"

BELLATO-GIL, Patricia Lyssette, AGUIRRE-MORALES, Fabiola, MENDOZA-LOYO, Octavio Iván and CASTILLO-BLANCO, José Said

Universidad Tecnológica del Centro de Veracruz



