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Psychosocial Profile and Use of Information and Communication Technologies by Students with High Academic Averages and a Minimal Presencial Educational Modality in a Mexican Context

Perfil psicosocial y uso de las tecnologías de la información y la comunicación de alumnos con promedios académicos altos y mínimos de la modalidad educativa presencial en un contexto mexicano

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Abstract

Ting and Robinson (1998) and Dimmitt (2003) present the need to study the topic of academic success including psychosocial aspects of the pupils. The objective of this research was to describe the psychosocial profile and the use of the Information and Communication Technologies (ICTs) of undergraduate students. The research design used for this purpose was non-experimental transectional descriptive. The instruments were a questionnaire for the Integral Profile of the Student and the Gordon Personal Profile Inventory. The sample consisted of 469 Mexican undergraduate pupils who receive traditional education. The results show that there is a significant difference statistically speaking according to the p value (0.000; 0.025; 0.004.000) obtained in the ANOVA for the cognitive and emotional areas, use of the ICTs and self-esteem of the surveyed students with high GPA.

Key words: Psychosocial profile, academic achievement, face to face education, information technology.

Resumen

El objetivo de esta investigación fue describir el perfil psicosocial y de uso de las tecnologías de la información y la comunicación (TIC) de estudiantes universitarios, de la modalidad educativa presencial. El diseño de investigación fue no experimental transeccional descriptivo. Los instrumentos utilizados fueron el Cuestionario Perfil Integral del Estudiante y el Perfil-Inventario de Personalidad de Gordon para una muestra de 469 estudiantes mexicanos del nivel universitario. Los resultados muestran que hay una diferencia estadística significativa, a favor de los alumnos encuestados con promedio académico alto, de acuerdo con el valor p (0.000; 0.025; 0.004, 0.000) obtenido en los análisis de varianza (ANOVA) para las áreas cognoscitiva, emocional, uso de las TIC y autoestima.

Palabras clave: Perfil psicosocial, desempeño académico, educación presencial, tecnologías de la información y la comunicación.

Introduction

Jimerson, Ferguson, Whipple, Anderson y Dalton (2002) revealed the need for further research on the subject of academic success, as it traditionally is associated with intellectual abilities and numerical, spatial, or verbal skills. In their longitudinal study, they explored the association of socio-emotional and behavioral aspects with grades and retention, and found that success in school is related only to psychological and intellectual abilities. Ting and Robinson (1998) confirmed that the combination of intellectual abilities with psychological abilities is more effective in predicting academic success, than considering just one of the variables, either the cognitive or psychological, or the scores obtained in the previous educational level. These authors concluded that the phenomenon of school performance is a multifactorial issue.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) (1998), during its world declaration in Paris, presented a series of requirements, the product of the current era, which provide guidelines for the consolidation of education based on Technologies of Information and Communication (ICTs). An example is the need for imparting and acquiring education through a multitude of media and from people that originate in many places. Hence, the use of educational technology in the teaching-learning process is essential in preparing students for the globalized world in which they operate, and for the knowledge era in which they live. These demands show that for learning and academic achievement, education should be linked to technology. Consequently, it is a factor in questions having to do with the consistency between students' integration into the knowledge society, and their scholastic reality when they perform their professional studies.

In considering the above, this question arises: "How does one express the psychosocial variables and use of ICTs for undergraduate students who are working in a modality of presencial education?" And so, in consequence of the foregoing, there developed the general objective of this investigation: to describe the psychosocial profile and use of ICTs in university students in the presencial educational modality. To understand and analysis the problem under investigation, each of the psychosocial components that comprise it was broken down. In the first instance, the profile is the written representation of the results of an analysis, according to Bruno (1997). The profile for this study is the set of psychological traits of an individual, or the interrelation of components that make up aspects of the personality. This study aims to identify the line that students follow to gain high or low scholastic averages, as well as to show, through an analysis of descriptive results, the characteristics that make up the psychosocial profile of the successful student.

The psychosocial profile of the individual is shaped by these constructs: a) cognitive, such as knowledge and the use of learning strategies, strategic thinking, the personal attributes of success and self-regulation; b) social, such as leadership, cultural adaptation, learning atmosphere, a sense of belonging and a network of support; and c) emotional, such as self-motivation, self-esteem, perseverance, assertiveness and management of the emotions and personality. The constructs that make up the use of ICTs are: a) accessibility and use of computer technology, b) software management, c) use of Internet applications and technology in learning, and d) a positive attitude toward technology.

The following is a list of the specific objectives of the study, as derived from the general objective:

To design an instrument which can describe the psychosocial characteristics and use of ICTs by students with maximum and minimum scholastic averages;

To compare the indices of the psychosocial variables and the use of ICTs obtained from the Integrated Student Profile Questionnaire (CPIE) and from Gordon's Personal Profile Inventory (P-IPG), regarding university students with maximum and minimum scholastic averages in a presencial classroom modality.

To analyze the dependency between belonging to some psychosocial area, and scholastic performance.

I. Method

This investigation used an non-experimental, transectional, descriptive design. According to Hernandez, Fernandez and Baptista (2003), there is no intentional manipulation in this type of design because it investigates the events as they occur in their natural environment; and the subjects already belong to a particular group of the independent variable for self-selection. This design allowed us to identify the profile of the successful student, to consider his/her intellectual abilities, and to measure psychosocial variables and the use of ICTs, by having students fill out the instruments *Integrated Student Profile Questionnaire (CPIE)* (see Annex 1) and *Gordon's Personal Profile and Inventory (P-IPG)*.

The group studied belonged to a private institution of Mexican higher education, the Monterrey Technological Institute of Higher Learning (ITESM), which offers degree programs in 35 areas (Elizondo, 2003). For the six-months period from January to May, 2004, the Monterrey campus had 15,636 students enrolled at the professional level (ITESM, 2004). As regards their socio-economic condition, the students came from the upper and middle-class strata, as classified by the National Institute of Political Studies (Martinez and Salcedo, 1999). There were also scholarship students belonging to the middle class. The teaching/learning process is presencial, with the student attending a classroom and the teacher imparting knowledge based on a curriculum design. Certain learning activities are supported by the use of technology, such as the content-administration system called

Blackboard, a technological platform that cultivates interaction between students and teachers, facilitates monitoring and timely response to the needs of students and teachers, and promotes information and communication through technological networks (Martin, 2002).

The population came from the ITESM Scholastic Department, Monterrey Campus. First selected was a group of 2,496 students who earned a score higher than stipulated on the institution's admissions test, which measures math and verbal abilities. These students had a cumulative average of 85 or more, were in second semester or beyond, had an Email address, and were not studying on a scholarship. Students with scholarships participated in the pilot test. The second ITESM group from the Monterrey Campus was made up of 2,964 students whose cumulative averages ranged from 70 to 80, were in second semester or beyond, and had an Email address.

A joint sample was used, and consisted of 562 students, 219 of whom had a high scholastic average, and 250 who had a minimum scholastic average.

The study was conducted under ethical criteria suggested by the American Psychological Association (APA) (1992) and the Committee for the Protection of Human Participants in Research (1982). The monitoring of these criteria involves approval for the educational institution to conduct the investigation, while respecting the dignity and integrity of the participants; and respecting the right to privacy, non-interference in personal life or in the environment of the participant and the offering of relevant information to participants concerning the research results and conclusions.

To carry out this investigation, two instruments were used. One, the Integrated Student Profile Questionnaire (CPIE), was designed by the authors; The other was Gordon's Personality Profile Inventory (P-IPG), designed by Martinez and Trejo Romero (1994). Two pilot tests, involving 1120 students, were conducted to validate the CPIE instrument. It was a test having validity concurrent with the P-IPG. The reliability of the CPIE instrument was measured with Cronbach's Alpha (calculation of the coefficient of reliability or internal consistency). Cronbach's coefficient is a value which indicates the reliability of a survey. *Reliability* refers to the confidence assigned to the data, which is related to the stability or consistency, the coherence or internal consistency, and the accuracy of the measurements obtained with the instrument. *Validity* has to do with the degree to which the instrument measures what one actually wishes to measure. The cognitive social and emotional aspects, as well as the use of ICTs, were measured with the CPIE, while the P-IPG was correlated with these tests: *School and College Ability Test (SCAT)*, *Employee Aptitude Survey*, *Navy Test Battery*, *16 PF*, *Guilford-Zimmerman Temperament Inventory*, *Thurston Temperament Schedule*, *Adult Opinion Survey* and Pinillos's *Personality Questionnaire*.

The P-IPG measures nine personality traits:

- a) Ascendancy: active role in the group, independence, self-assurance when relating with others;
- b) Responsibility, perseverance, tenacity, determination and trustworthiness;
- c) Emotional Stability: stability, relative freedom from worries, anxiety and nervous tension.
- d) Sociability: enjoys being with and working with others, gregarious and sociable.
- e) Self-esteem: the sum of the first four steps, and indicative of a feeling of self-worth.
- f) Caution: careful consideration of the situation before making a decision, and a dislike for taking risks.
- g) Originality: working on difficult problems, showing intellectual curiosity and a taste for reflection and producing new ideas.
- h) Personal relations: trust and confidence in people, tolerance, patience and understanding.
- i) Vigor: vitality, energy and a liking for working or moving with rapidity.

The two instruments were applied by computer, to facilitate availability and confidentiality regarding the data.

Care was taken to protect both internal and external validity. To preserve the internal validity of the study, the threats identified by Campbell and Stanley (1966) were avoided: history, maturation, instrumentation, statistical regression, choice of the previously-formed groups and mortality. It should be noted that by means of the agreement to participate in the investigation, a commitment was obtained from the students. To preserve the external validity, the six threats suggested by Bracht and Glass (1968) were taken into account: interaction with the selection, multiple treatment interference, interaction with the treatment, specificity of variables, the effect of the experimenter and reactive manner.

To describe the populations of students with both minimum and maximum averages, the statistical procedure *homogeneity of variances test* was used, and it was found that, except for self-esteem, the population variances are equal. Therefore, an Analysis of Variance (ANOVA) was done for the variables showing homogeneity in variances; Kruskal Wallis's non-parametric test was used for self-esteem, since this did not show equality in population variances.

II. Results

The sociodemographic results of this investigation indicate the following for the case of those students with a high scholastic average:

- 65% are between 21 and 25 years of age;
- 99% are single;
- 53% are male;

- 55% are from foreign countries;
- 53% are majoring in engineering;
- 81% are involved in some extracurricular activity.

For the case of those students with the lowest scholastic average, the results are:

- 74% are between 21 and 25 years of age;
- 99% are single;
- 70% are male;
- 63% are from foreign countries;
- 62% are majoring in engineering;
- 70% are involved in some extracurricular activity.

The result for Cronbach's Alpha was 0.8696 (the minimum necessary to indicate that the survey is reliable is 0.70).

The following is a series of tables showing the results of the descriptive analysis of the survey students with high and minimum scholastic averages. Table I indicates the number of participants, and the mean and standard deviation in the areas designated *cognitive, social, emotional, and use of ICTs*.

Table I. Descriptive analysis of the psychosocial area and ICTs

Aspects	N	\bar{X}	DE
<i>Students with high scholastic average</i>			
Cognitive	219	9.237	3.053
Social	219	7.553	2.572
Emotional	219	10.352	2.518
Use of the technology	219	6.530	3.095
<i>Students with lowest scholastic average</i>			
Cognitive	250	11.480	3.412
Social	250	7.556	3.462
Emotional	250	10.936	3.024
Use of the technology	250	7.408	3.483

Note: Self-evaluation Excellent= \bar{X} 5-8;

Good= \bar{X} 9-12; Fair= \bar{X} 13-17;

Low= \bar{X} 18-21; Lowest= \bar{X} 21-25

The results of the means shown in Table I make it evident that the survey students with a high scholastic averages have a better self-evaluation in the use of ICTs, followed by the social and cognitive areas, and last, by the emotional. The students with lowest scholastic average had a better sel-evaluatoin in the area of ICT use, followed by the social, emotional and cognitive aspects.

Table II shows a descriptive analysis of the students with highest and lowest scholastic averages, according to the number of participants, and mean and standard deviation in the area of personality.

Table II. Percentile personality analysis of students with highest and lowest scholastic averages

Personality aspects	itesm 1	itesm 2
Ascendancy	98	71
Responsibility	67	50
Emotional stability	52	69
Sociability	43	37
Self-esteem	60	53
Caution	38	38
Originality	23	23
Personal relationships	45	35
Vigor	42	42

Note: ITESM 1= students with high scholastic averages
ITESM 2= with lowest scholastic averages

Table II shows that the survey students with high scholastic averages, demonstrate higher percentages in the aspects of ascendancy, responsibility, sociability, self-esteem, and personal relationships than do those with lowest scholastic averages.

Table III presents the results of the ANOVA, in the psychosocial area and use of ICTs.

Table III. Analysis of ANOVA variance for the psychosocial area

Aspects	gl	F	P
<i>Students with highest and lowest scholastic averages</i>			
Cognitive	1	55.61	.000 **
Social	1	0.00	0.990
Emotional	1	5.09	.025 *
Use of the technology	1	8.23	.004 **
Ascendancy	1	0.29	0.591
Responsibility	1	3.03	0.082
Emotional stability	1	0.67	0.414
Sociability	1	1.83	0.177
Caution	1	0.28	0.594
Originality	1	0.35	0.084
Personal Relationships	1	0.63	0.428
Vigor	1	0.10	0.755

Note: * p < .05; ** p< .01.

Table III shows the presence of a significant statistical difference between those students with a high scholastic average and those with a minimum, in the cognitive and emotional aspects, and in the use of ICTs.

The following shows the results of the analysis of variance for the Kruskal Walls non-parametric test for self-esteem, which, as mentioned above, was not homogenous.

Table IV. Self-esteem of itesm students

Aspect	N	p
<i>Students with highest and lowest scholastic averages</i>		
Self-esteem	469	.000 *

Note: * p < .01.

Table IV indicates that there is a significant statistical difference in the area of self-esteem, in favor of the students with a high scholastic average, as compared with the students who had a minimum scholastic average.

Other psychosocial outcomes and the use of ICTs highlighted differences in the areas of the constructs that were evaluated as better and worse. In the cognitive area, the aspect self-evaluated as best was self-regulation, and the worst was the use of learning strategies. In the social area, the aspect showing self-evaluation as best was counting on a support network in time of need, and the worst was leadership. In the emotional area, the aspect self-evaluated as best was self-esteem, and the worst, assertiveness. In the area Use of Technology, the aspect self-evaluated as best was access to technology, and the worst, its use in learning. Finally, in the area of personality, the students with high scholastic average and those with the minimum received the same evaluation score in the aspects of caution, originality, and vigor. The aspect evaluated as best was ascendancy.

The test for independence was performed as well, to determine whether there is any dependence between academic performance and psychosocial area. Table V shows the presence of a relationship between these aspects.

Table V. Test for independence between academic performance and the psychosocial area

Aspects	2X	F	p
<i>Students with highest and lowest scholastic averages</i>			
ITESM	14.563	4	0.006 *

Note: * p < 0.01.

Table VI shows the strong area for the survey students having a high scholastic average; this means the highest percentage obtained on the CPIE in the four psychosocial aspects in the four psychosocial aspects identified by participating students.

Table VI. Contingent of students con high scholastic average

Aspects	Percentage
Cognitive	16.42 %
Social	8.80 %
Emotional	11.43 %
Use of ICTs	1.97 %

According to Table VI, the areas of strength for the students with high scholastic averages are first, the cognitive, followed by the emotional, and the social, and last, by the use of ICTs.

III. Discussion

There are aspects in which those students with high scholastic averages differ from those with the lowest scholastic average:

- Participation in extra-curricular activities;
- Previous experience in the use of the technology'
- Academic level of their parents.

In these, the students with a minimum grade point average obtained lower percentages. The students with a high scholastic average showed a better self-evaluation in the cognitive, social and emotional areas. In the area of personality, the percentile of the aspects ascendancy, responsibility, sociability and self-esteem, are higher in the survey students with a high scholastic average.

Regarding the initial question of the investigation, "Were there significant differences between the indices of psychosocial variables and the use of ICTs by the professional-level students with high academic and minimum averages, as displayed in a presencial modality?" The results showed a significant statistical difference, according to the p values (0.000, 0.025, 0.004), obtained in the ANOVA for the cognitive and emotional areas and use of ICTs, in favor of the survey students with high scholastic averages. These students scored higher on the CPIE, in the cognitive and emotional scales, and the use of ICTs, in comparison with those with minimum grade point averages. The findings coincide with research conducted by Ting and Robinson (1998); Jimerson, Ferguson, Whipple, Anderson and Dalton (2002); Dimmitt (2003) and Noble and Sawyer (2004), who maintain that academic performance is associated with psychosocial aspects.

In addition to this, we found a significant statistical difference, according to the p value (0000), obtained on the ANOVA for the aspect of self-esteem for the survey students having a high scholastic average. This finding agrees with Leondari, Syngollitou and Kiosseoglou (1998), who found that better academic performance was achieved by students who imagined and viewed themselves as becoming successful in the future

On the other hand, belonging to some type of psychosocial area depends on academic performance. As per the p value (0006) obtained on the ANOVA, it can be demonstrated that there is a relation between psychosocial aspects and academic performance. In the case of survey students with a high scholastic averages, the cognitive aspect is stronger, and there is a tendency for the emotional aspect to be strong.

These results agree with those found by Stragá *et al.* (2002), who in compiling the profiles of successful and unsuccessful students in terms of grades, discovered an association between academic performance, the number of hours students spend studying, management of time, search for scholastic challenge, strategic thinking focused on the goal, and self-directed learning.

As a result of this study, it can be seen that there are certain areas in which it would be enriching investigate further, for example, regarding the variables related to the strength of each population; the description of the psychosocial profile and use of ICTs, the successful student from the perspective of principals, teachers and parents; the implementation of a diploma course on psychosocial-skills development and use of ICTs, based on the knowledge generated in the profiles in this investigation, and an evaluation of its impact on academic performance.

The contributions resulting from this study, are related to the multifactorial analysis of academic performance in presencial education modality in a Mexican context, and the results give guidelines for reflection upon both the students and the institution through which to establish new strategies related to school performance.

References

- American Psychological Association. (1992). Ethical principles of psychologist and code of conduct. *American Psychologist*, 47, 1597-1611.
- Bracht, G. H. & Glass, G. V. (1968). The external validity of experiments. *American Educational Research Journal*, 5, 437-474.
- Bruno, F. J. (1997). *Diccionario de términos psicológicos fundamentales*. Barcelona: Paidós.
- Campbell, D. T. & Stanley, J. C. (1966). *Experimental and quasi-experimental designs for research*. Chicago: Rand McNally & Company.
- Committee for the Protection of Human Participants in Research. (1982). *Ethical principles in the conduct of research with human participants*. Washington, DC: American Psychological Association.
- Dimmitt, C. (2003). Transforming school counseling practice through collaboration and the use of data: A study of academic failure in high school. *Professional School Counseling*, 6 (5), 340-355.
- Elizondo, R. (2003). *Tecnológico de Monterrey: Cauce y corrientes, sesenta aniversario*. Monterrey, Mexico: Instituto Tecnológico y de Estudios Superiores de Monterrey.
- Hernández, R., Fernández, C. & Baptista, P. (2003). *Metodología de la investigación*. Mexico: Mc Graw Hill.
- Instituto Tecnológico y de Estudios Superiores de Monterrey (2004). *Datos estadísticos del Centro de Efectividad Institucional*. Retrieved January 15, 2004 from: <http://cei.mty.itesm.mx/sidii.asp>. Currently available in:
http://www.itesm.mx/informeanual/InformeAnual_ITESMAC2004.pdf
- Jimerson, S. R., Ferguson, P., Whipple, A. D., Anderson, G. E. & Dalton, M. J. (2002). Exploring the association between grade retention and dropout: A longitudinal study examining socio-emotional, behavioral, and achievement characteristics of retained student. *The California School Psychologist*, 7, 51-62.
- Leondari, A., Syngollitou, E. & Kiosseoglou, G. (1998). Academic achievement, motivation and future selves. *Educational Studies*, 24 (2), 153-164.
- Martín, M. (2002). *El modelo educativo del Tecnológico de Monterrey*. Monterrey: Instituto Tecnológico y de Estudios Superiores de Monterrey.
- Martínez, H., Romero, B. E., & Trejo, M. C. (1994). *Perfil e Inventory de la Personalidad* (Trad., L. V. Gordon). Mexico: El Manual Moderno. (Original work published 1953).

Martínez, M. & Salcedo, R. (1999). *Diccionario electoral*. Mexico: Instituto Nacional de Estudios Políticos.

Noble, J. P. & Sawyer, R. L. (2004). Is high school GPA better than admission test scores for predicting academic success in college? *College and University*, 79 (4), 17-23.

Organización de las Naciones Unidas para la Educación la Ciencia y la Cultura (1998). La declaración mundial sobre la educación superior en el siglo XXI: visión y acción y marco de acción prioritaria para el cambio y el desarrollo de la educación superior. *Revista Perfiles educativos*, 79-80. Retrieved September 8, 2003 from: <http://www.cesu.unam.mx/iresie/revistas/perfiles/perfiles/79-80-html/Frm.htm>

Strage, A., Baba, Y., Millner, S., Scharberg, M., Walker, E., Williamson, R., & Yoder, M. (2002). What every student affairs profesional should know: Student study activities and beliefs associated with academic success. *Journal of College Student Development*, 43 (2), 246-267.

Ting, S. R. & Robinson, T. L. (1998). First-year academic success: A prediction combining cognitive and psychosocial variables for Caucasian and African American students. *Journal of College Student Development*, 39 (6), 600-701.

Annex 1. Integrated Student Profile Questionnaire

General data

1. Age

16-20 years	
21-25 years	
26-30 years	
31-35 years	
36-40 years	
Over 40 years	

2. Civil state

Single	
Married	
Divorced	
Widowed	

3. Sex

Male	
Female	

4. To which state of the Mexican Republic do you belong?

a. State

b. Foreigner

North American	
Central American	
South American	
Caribbean	
European	
Asian	
Oriental	
Other, specify	

5. Modality to which you belong

Presencial	
Distance learning	

6. Mark your course of study

B.A. in Business Administration	
B.A. in Financial Administration	
B.A. in Public Accounting and Finances	
B.A. in Economics	
B.A. in Law	
B.A. in Technomarketing	
B.A. in International Business	
Biomedical Engineer	
Surgeon	
Electronic and Communications Engineer	
Physico-Industrial Engineer	
Computer Systems Engineer	
Electronics Systems Engineer	
Information Systems Engineer	
B.A. in Computer Systems	
B.A. in Communication Science	
B.A. in Spanish Literature	
B.A. in Journalism and Information Media	
B.A. in Political Science	
B.A. in Organizational Psychology	
B.A. in International Relations	

7. Semester

8. Do you perform some extra-academic activity?

Yes	
No	

9. What language(s) do you speak:

Spanish	
English	
French	
German	
Other, specify	

10. Some students did finish their studies. If this is your case, what was the most important reason?

I am sure that I am going to finish my studies.	<input type="checkbox"/>
Academic reasons like low scholastic achievement	<input type="checkbox"/>
Because I wasn't sure about my vocation, or I had made a bad choice of major	<input type="checkbox"/>
Because of emotional problems	<input type="checkbox"/>
Family reasons, such as the lack of family support, or some family problem	<input type="checkbox"/>
Financial reasons	<input type="checkbox"/>
Other, specify	<input type="checkbox"/>

11. When you started studying, did you have previous experience using technology in the teaching-learning process?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

12. Are you working now?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

13. Why did you choose this institution?

Because of its institutional prestige	<input type="checkbox"/>
Because of the academic and professional training it offers	<input type="checkbox"/>
Because they offered me a scholarship	<input type="checkbox"/>
For financial reasons	<input type="checkbox"/>
My family chose it.	<input type="checkbox"/>
Other, specify	<input type="checkbox"/>

14. How are you paying for your education?

By money I earn working	
With the help of my parents or guardians	
With a scholarship	
Other, specify	

15. Educational level of your parents

Educational level	Father	Mother
Postgraduate level		
University level		
Technical level		
High school level		
Junior high or elementary school level		
Other, specify		

16. Do your parents or guardians work at a paying job?

	Father or Guardian	Mother or Guardian
Yes		
No		

17. Your parents' occupation

Occupation	Father or Guardian	Mother or Guardian
Business owner		
Employed in the public sector		
Employed in the private sector		
Homemaker		
Retired		
Other, specify		

Please indicate to what extent you agree or disagree with each statement in the following. Mark an X below the number that corresponds to the value you assign it.

1= Totally agree

2= Agree

3= Neutral

4= Disagree

5= Totally disagree

Aspects	1	2	3	4	5
18. I consider myself a successful learner					
19. I usually organize my time according to a study schedule.					
20. In my student life, I have distinguished myself by organizing the information learned through diagrams, summaries and forms.					
21. I easily set realistic goals and know the procedures for reaching them.					
22. I believe that my achievements are mainly due to my efforts.					
23. I believe that I am responsible for my own learning.					
24. Normally, I learn better when I feel comfortable in the context where the teaching-learning process is generated.					
25. I feel that the customs of my place of origin are accepted by others.					
26. I feel proud to belong to this institution.					
27. I am sure that if I should some personal problem, I could count on the support of someone, either my parents, my significant other, friends, teachers or psychologists.					
28. People around me follow my initiative and my proposals more than they do those of others.					
29. I feel motivated to carry out my school activities.					
30. I feel proud of being who I am.					
31. It's hard for me to say "no" to people, even when it's not good for me.					
32. Often, people close to me comment that I am very persistent about what I plan to do.					
33. In any personal situation, it is easy for me to recognize what I am feeling, and to manage my emotions.					
34. I have access to a computer on which to do my schoolwork.					
35. It's easy for me to use the Microsoft Office software.					
36. I use the Internet applications to get information, and to keep myself in contact with people.					
37. I take advantage of, and use certain electronic media for learning, such as platforms and/or computer programs.					
38. I think technology is not helpful for learning.					

39. What other aspects do you think define a successful student?

40. If you are interested in the results of this questionnaire and want to receive follow-up information, please write your full name, matriculation number, major, semester and email.

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