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RESEARCH ARTICLE

Self-Esteem, Study Habits and Academic Performance Among University Students

Autoestima, hábitos de estudio y rendimiento académico en estudiantes universitarios

Manuel L. Chilca Alva

Universidad Nacional Mayor de San Marcos, Lima, Perú.

Ministerio de Salud del Perú, Lima. Perú.

Universidad Nacional Santiago Antúnez de Mayolo, Huaraz, Perú.

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Corresponding author:

Email: luis_chilca@hotmail.com

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Summary

This study was intended to establish whether self-esteem and study habits correlate with academic performance among university students. Research conducted was descriptive observational, multivariate or cross-sectional factorial in nature. The study population consisted of 196 students enrolled in a Basic Mathematics 1 class at the School of Engineering of Universidad Tecnológica del Perú (Technical University of Peru, UTP) in the third term of 2016, and the sample size numbered 86 students. The Coopersmith Self-Esteem Inventory, Luis Vicuña Peri's Study Habits Inventory and the average grades obtained by students were used for research variable measurement. Results show that self-esteem does not significantly impact academic performance, but study habits do influence academic performance ($p = .000 < \alpha = .05$). Hence students are expected to enhance academic performance as they refine study techniques.

Keywords: Academic performance, self-esteem, study habits

Resumen

El objetivo de la presente investigación fue determinar la relación entre la autoestima, los hábitos de estudio con el rendimiento académico de los estudiantes universitarios. El diseño de la investigación fue descriptivo observacional, multivariada o factorial de corte transversal. La población de estudio, estuvo conformada por 196 estudiantes de la Facultad de Ingeniería de la Universidad Tecnológica del Perú (UTP), matriculados en el curso de Matemática Básica I, durante el semestre académico 2016 - III y el tamaño de la muestra fue de 86 estudiantes. Para la medición de las variables de investigación, se utilizó el inventario de autoestima (elaborado por Stanley Coopersmith), el Inventario de hábitos de estudio (elaborado por Luis Vicuña Peri) y el reporte de los promedios de las calificaciones de los estudiantes. Los resultados evidenciaron que no existe una influencia significativa entre la autoestima y el rendimiento académico, pero sí entre los hábitos de estudio y el rendimiento académico de los estudiantes ($p=.000 < \alpha=.05$); en conclusión

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se espera que si los estudiantes mejoran sus técnicas de estudio entonces se incremente su rendimiento académico universitario.

Palabras claves: Rendimiento académico, autoestima, hábitos de estudio.

Introduction

At present, academic performance is measured on the basis of student grades, which is among the key elements in the construction of an educational institution's image (Escudero, 1999), hence our interest in researching and identifying the major factors that have a bearing on students scoring well or poorly on their classes.

The challenges of studying academic performance lie in defining the term itself. Often referred to as school achievement, academic performance or school performance, conceptual differences between tend to be only semantic in nature, as these terms are used as synonyms. It has been agreed that academic performance should refer to university populations, whereas school performance applies to regular and alternative basic education populations (Lamas, 2015). Below is a sample of the countless definitions of the term.

From a humanistic approach, Martínez-Otero (2007, as cited in Lamas, 2015) defines academic performance as the outcome of a student's efforts at educational establishments, which is usually expressed through educational grades.

On the other hand, Torres & Rodríguez (2006, cited by Lamas, 2015) conceptualizes academic performance as the level of knowledge demonstrated in an area or subject as compared against the standard, which is generally measured by the student's average grade. Academic performance may also be expressed as a quantitative and qualitative score, a grade, which if coherent and valid, will reflect the level of learning generated by the teacher-student relationship on the basis of the goals set out early in the class (Rodriguez, 2000, Touron, 1984). Several years ago, Escudero (1999) stated that grades measure the results of teaching, yet not, strictly speaking, the quality thereof, as they are not only conditional upon the student's quality but also the teacher's individual discretion and rigor when planning teaching and assessing and rating academic learning and performance.

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Diaz's (2010) research found that school performance measurement has been the object of ongoing criticism. He questions whether the grade obtained in an assessment is a truthful measure of the learning obtained by the students, given that other factors (family, society, the teacher's teaching-learning activity) are most relevant to the optimal educational development of the students.

Therefore, academic performance is clearly influenced by countless variables that are intricately linked, which makes it challenging to investigate. However, academic performance does involve factors such as intellectual skills, personality, motivation, aptitudes, interests, study habits, self-esteem or the teacher-student relationship. Discrepancies between a student's academic performance and his or her expected performance are known as differing performance. Unsatisfactory academic performance is one that is below the expected performance. This may at times be connected to teaching methods (Chipana, 2012; Larrosa, 1994; Marti, 2003, as cited in Lamas, 2015).

Self-Esteem and Academic Achievement.

On the variables cited by different authors as influencing academic performance is self-esteem, which accounts for many academic successes and failures, according to Manassero and Vazquez (1995). Therefore, both self-esteem levels and their connection with academic performance within the study population are to be ascertained so as to implement solutions to improve students' self-esteem should it be the case. Trahtemberg Siederer (1996) holds that university lecturers should be specifically educated in the psychological dimensions of their students, in order to improve their learning.

Bolivar (2006) argues that as people develop self-esteem in their daily lives, whether constructive or destructive, self-esteem has the ability to shape their own concept of themselves. To respond to criticism, a person must feel confident to discern such criticism as is supportive of his integrity as a person from that which is opposed to it, as negative criticism can wreak havoc on a

person, heavily taxing his self-respect, even leading him to believe that he is a complete failure.

Research into the connection between self-esteem and academic performance include a study conducted by Acuña (2013), which found them to be positively correlated, as the majority of students enrolled in the 10th cycle of the Professional Academic School of Primary Education and Learning Problems in the second term of 2012 registered average to high self-esteem (71% of the students), which positively influenced their academic performance (good and excellent). He recommended the José Faustino Sánchez Carrión National University, in the Huacho district, to cover this essential aspect of students' education by intensifying student counselling and tutoring on the part of the teachers, in order to raise students' self-esteem (which is often low) to higher levels (average and high) and have them score good or excellent grades.

Nicho's research (2013) found that a dependency relationship, as well as a close and direct association, occurs between a student's self-esteem and his or her academic performance, as evidenced by the calculated p-value, which is below the statistical significance ($P = .000 < \alpha = .05$). In addition, he established that 60% of students have low self-esteem. While they do not see themselves as inferior to their peers, they feel that their peers hold a higher position than themselves.

Study Habits and Academic Performance

Study habits are also among studied variables. According to Rondón (1991), study habits play a major role in the improvement of a student's academic performance. Similarly, Aduna and Marquez (1987) hold that deep-rooted study habits are behind sound academic performance.

A review of literature on the relationship between study habits and academic performance reveals that scholars established a significant and positive relationship between levels of study habits and academic performance levels (Sánchez, 2016, Sánchez Briseño, 2016 and Paredes Ayrac, 2008).

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Similarly, Cepeda (2013)'s study found that the study habits and academic performance of the students of the 10th year of General Basic Education at Provincia de Bolívar High School, are dependent on one another, that is, study habits impact academic performance.

Mendoza (2011) finds that the study habits of 52% of the students enrolled in the 2nd year of Agronomy at Hermilio Valdizan University in Huánuco (UNHEVAL) are far from appropriate, their academic performance being low, which also established the influence of study habits on academic performance.

Academic Performance Among University Students

In order to ascertain the academic performance of students enrolled in the School of Engineering of Universidad Tecnológica del Perú, the university's student assessment indicators and academic records were studied, which showed that in the previous academic term (2016 - II), about half the Basic Mathematics 1 class students (47.8%) failed the class, i.e. obtained grades below 10 points. The overall grade point average was 10.068 points, below the pass mark. Hence the idea was to establish whether self-esteem and/or study habits are tied to academic achievement in order to address the challenges faced by the university. The purpose was for the university to better serve students and for the administration to lay down teaching work policies to raise educational indicators, thus preventing students from dropping out to transfer to other universities or the lifespan of their studies, as well as their payable tuition, from escalating. The Organization for Economic Co-operation and Development (OECD)'s research on the consequences of low academic performance shows that the dropout rate in the United States amounts to 35%, whereas in Spain it is over 20% and in Italy it is up to 60% (2008, cited by Logros Peru, 2008). In Peru, dropouts cause losses in the amount of over 100 million dollars every year (Plasencia 2008, as cited in Logros, 2008).

Therefore, the degree of connection between the study variables is to be determined as it will allow both the university and the class lecturers to devise measures to boost student's academic performance. Hence the research was intended to ascertain whether a relationship exists between self-esteem and study habits, on the one hand, with academic performance, on the other, of those enrolled in the Basic Mathematics 1 class of the School of Engineering of Universidad Tecnológica del Perú in 3rd term of 2016.

Method

Nature and Design of Research.

Mejía Mejía (2005) describes this study as scientific, formal, theoretical, ex post facto, quantitative, field-based, primary and cross-cutting in nature. Research design selected was descriptive observational and multivariate or factorial (multiple linear regression analysis and Pearson's correlation coefficient) because the data collection instruments were applied at a particular moment in time.

Population and Sample.

The population consisted of 196 students enrolled in the Basic Mathematics 1 class of the School of Engineering of Universidad Tecnológica del Perú in 3rd term of 2016, covering a total of 6 classrooms in the morning session. The sample size was 86 students; the sample size was calculated using the simple random sampling formula to estimate the mean of a finite population, considering the value of the statistic in the normal distribution table with a confidence level of 95 %, which is equal to 1.96. The grade variance and the average grades were examined in the light of the students' achievement in the Basic Mathematics 1 class of 2016 – 2nd term , whose values were S^2=14.598 and X= 10,068), and the error considered was 6% the grade average (e=0. 604).

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Data Collection Instruments.

The data were obtained through the application of two instruments: the Coopersmith Self-Esteem Inventory (1997) and Vicuña's Study Habits Inventory (1999). For academic achievement, the students' grades report for the Basic Mathematics 1 class of the School of Engineering of Universidad Tecnológica del Perú for the academic semester 2016 - III were examined.

The Self-Esteem Inventory is a 58-item test with questions the answers to which are dichotomous. It is applied on an individual or collective basis, and it is based on 5 sub tests, namely: A lying test, oneself, social peers, parents home and university. The maximum score is 100 points and the lying test will void the entire test if a score higher than four is obtained. The scores are obtained by adding up the number of items answered correctly and multiplying this by 2 without including the lying test score, after which, based on the total sum of the test, the subject is assigned the corresponding category according to the scale proposed by the author.

On the other hand, the Study Habits Inventory is a 53-item test with questions the answers to which are dichotomous. It is applied on an individual or collective basis, and it is based on 5 sub tests, namely: How do you study? How do you do your homework? How do you prepare for your exams? How do you follow your classes? and, What accompanies your study moments? The maximum score is 53 points. The score is obtained by rating each of the items with either one (1) or zero (0), after which, based on the total sum of the test, the subject is assigned the corresponding category according to the scale proposed by the author.

Validity and reliability tests were run on each of the instruments, results of which guaranteed the accuracy of the results (the Kuder—Richardson reliability coefficient obtained was 0.64 for the Self-Esteem Inventory and 0.83 for the Study Habits Inventory). No changes were introduced into any of the instruments, therefore they have already been validated by the authors.

Analysis Plan.

The instruments were first applied in the regular classroom sessions, on the day and at the time agreed on with the class coordinator. Participants were selected at random. Prior to administration of the psychological instruments, respondents were advised of the purpose of the study and the use of their information, after which they signed a letter of informed consent and began to fill in the tests.

To develop the results, we began by analyzing and describing the data for each of the research variables, to which end absolute and relative frequencies were used. Central tendency measures and those of dispersion for each of the variables were estimated. An assumption testing process was presented for each of the research variables; the normality of the data (i.e. whether or not the data presented a normal distribution) was first assessed. Lastly, the research hypotheses were tested using the multiple linear regression analysis (the first five assumptions were tested using this statistical technique, namely: linearity, independence of errors, homoscedasticity of the residuals and forecasts, normality of errors and multicollinearity). We proceeded to assess the goodness of fit of the model used for analysis of variance (ANOVA), after which we calculated the Pearson correlation coefficient and then the model coefficients and their statistical significance. In all cases, a significance level of .05 was used. Statistical analysis was performed using software SPSS v. 22.0 ®.

Results

The estimated sample is 86 students enrolled in the Basic Mathematics 1 class at the School of Engineering of Universidad Tecnológica del Perú in term 3 of the 2016 year, the sampling frame being the list of students sitting in the 6 classrooms serving the said class.

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Descriptive Analysis.

Upon application of the research variable measurement instruments in light of the proposals by Stanley Coopersmith, Luis Vicuña Peri and Virgilio Vildoso Gonzales, Table 1 presents the results of which the following may be stated:

- 52.3% of students enrolled in the Basic Mathematics 1 class at the School of Engineering of Universidad Tecnológica del Perú have a "High" self-esteem level, followed by 41.9%, who have a "High-Average" self-esteem level, and 5.8% of students with a "Low-Average" self-esteem level-
- 36.1% of students enrolled in the Basic Mathematics 1 class at the School of Engineering of Universidad Tecnológica del Perú claim a "Positive" Study Habits level, which means that students have significant habits of study, but certain ways of collecting information and work when studying will need to be adjusted. 33.7% (29 students) fall into the "Trend(+)" category of study habits, which means that their study habits are different from those with a low academic performance. Therefore ongoing adjustment of their study techniques is not required. 14% (12 students) fall into the "Very positive" category of study habits, that is, such students have positive or appropriate study habits that help them in their academic learning process. 12.8% (11 students) fall into the "Tendency (-)" category of study habits, that is, they have inadequate study habits and their academic performance is often low. 3.5% (3 students) fall into the "Negative" category of study habits, which means that their academic achievement is low but their intelligence skills are high, hence their study habits need to be refined and adjusted. No students fall under the lowest category. Lastly, it could be said that close to 50.0% of students must correct their study habits if they are to

pursue their professional education to the best of their ability, and thus attain the objectives outlined for their studies.

- 39.5% of students enrolled in the Basic Mathematics 1 class at the School of Engineering of Universidad Tecnológica del Perú have a "Average/High" level of academic performance, followed by 32.6% who have a "Low/Average" level of academic performance, with 18.6% of students claiming "High" performance level, 8.1% "Low" academic performance, and 1.2% "Very low" academic performance. Therefore, about 41.9% of students have a low academic performance.

Table 1.

Student Self-Esteem, Study Habits and Academic Performance Frequencies and Percentages.

Research Variables	Frequency	%
Self-esteem level	86	100
High	45	52.3
Average High	36	41.9
Average Low	5	5.8
Low	0	0.0
Study habit level		
Very Positive	12	14.0
Positive	31	36.1
Tendency (+)	29	33.7
Tendency (-)	11	12.8
Negative	3	3.5
Academic performance level		
High (16 – 20)	16	18.6
Average High (12 – 15)	34	39.5
Average Low (8 – 11)	28	32.6
Low (4 – 7)	7	8.1
Very Low (0 – 3)	1	1.2

The results of the goodness of fit test on the normal distribution of student scores show that self-esteem, study habits and academic performance, present

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such distribution, which is why the statistics used to contrast the hypotheses were Parametric in nature (see Table 2)

Tabla 2.

Goodness of fit test on normal distribution (Kolmogorov Smirnov test).

Study variables	Number of data	Normal Parameters		Kolmogorov-Smirnov Z	Asymptotic Significance (bilateral)
		Mean	Typical deviation		
Academic Performance (average grades)	86	12.36	3.487	0.705	.703
Study Habits (total score)	86	35.67	8.120	1.045	.225
Student Self-Esteem (total score)	86.00	73.16	11.42	1.31	0.07

Hypothesis Testing

To compare the relationship between self-esteem, study habits and academic performance, multiple linear regression analysis was used. We first evaluated the 5 assumptions to apply the multiple linear regression model, which determined that the **linearity** assumption for self-esteem was not satisfied (see Figures No. 01 and 02). However, the scatter plot showed variance **homoscedasticity** (see Figure 3).

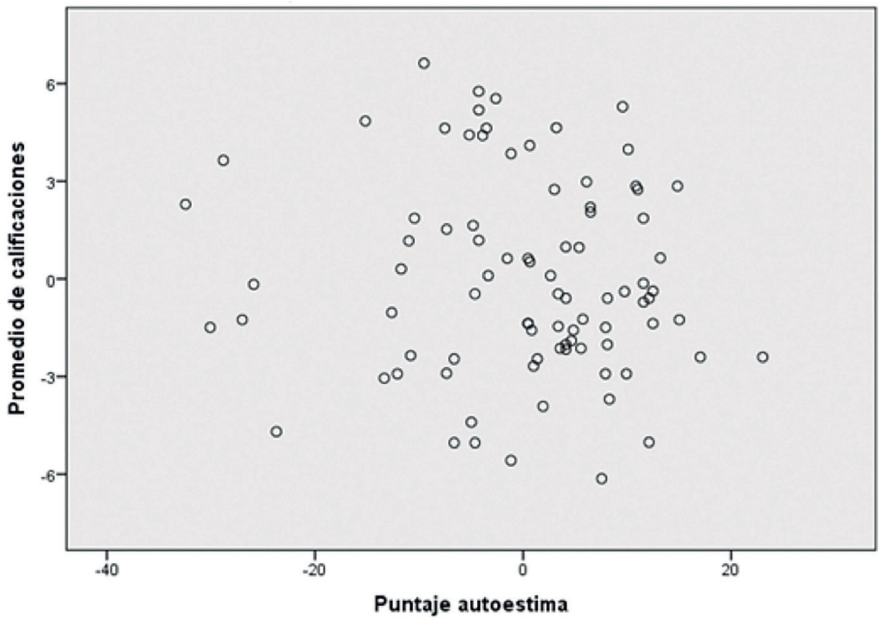

Figure 1. Partial regression graph of self-esteem and academic performance.

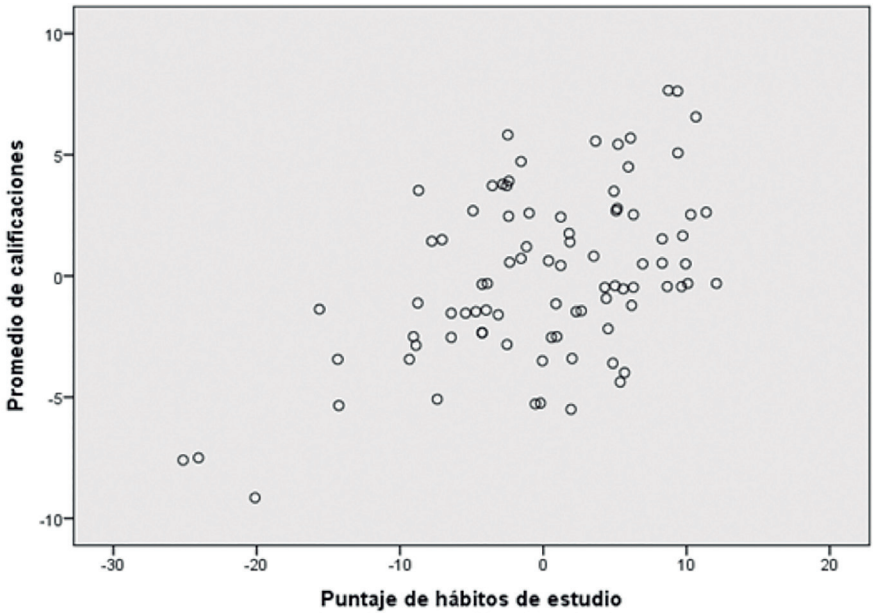

Figure 2. Partial regression graph of study habits and academic performance.

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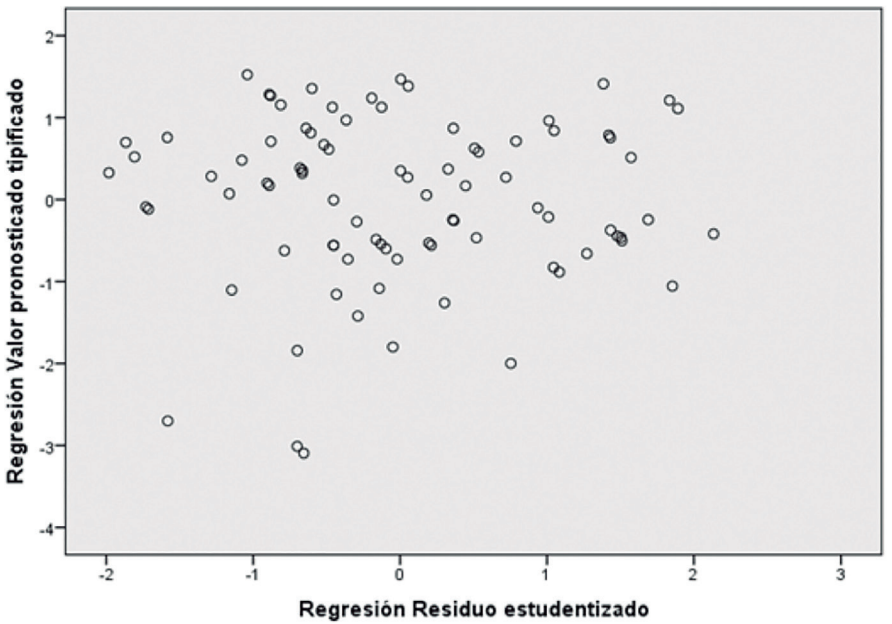

Figure 3. Scatter plot of standardized residuals and predicted academic performance.

It was determined that **independence of errors** occurred based on statistician Durwin Watson (see Table 3). Regarding the **normality of errors**, the Kolmogorff - Smirnov test showed a "p" value associated with the test statistic that was higher than the statistical significance ($p = 0.734 > \alpha = .05$), hence the errors (classified residuals) are normally distributed. In terms of latter assumption, we ascertained the occurrence of **multicollinearity** according to the Inflated Variance Factor (IVF) for Self-Esteem and Study Habits (see Table 5).

Upon testing the assumptions to perform the multiple linear regression analysis, the percentage of variance in academic performance accounted for by self-esteem and study habits was calculated, which was 24.5%. The correlation between variables was significant but moderately low (see Table 3).

Table 3.

Model Summary.

Model	R	R square	R square adjusted	Change Stats					Durbin-Watson
				Change in R square	Change in F	gl1	gl2	Next Change in F	
1	0.513	0.263	0.245	0.263	14.804	2	83	.000	1.255

As a third step, the multiple linear regression model was subject to the goodness of fit test based on the analysis of variance (ANOVA), which shows a significant correlation between self-esteem, study habits (independent variables) and performance (dependent variable) as the value p = 0.000 associated with the test statistic value (Fc) is below statistical significance α = .05 (p (.000) <α (.05)) (see Table 4).

Table 4.

Analysis of Variance (ANOVA) Table.

Source of Variance	Sum of Squares	gl	Root Mean Square	F	Sig.
Regression	271.824	2	135.912	14.804	0.000
Residual Error	762.001	83	9.181		
Total	1033.826	85			

Lastly, we calculated the multiple linear regression model coefficients. Student's t test shows that there is statistical significance for the study habits variable model coefficient as the calculated p-value is lower than the statistical significance (P = .000 <α = .05). However, the same is not true of the self-esteem variable because the p-value associated with the model coefficient is higher than the statistical significance (p = 0.401> α =. 05) (see Table 05).

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Table 5.

Statistical Significance of Model Coefficients

Coefficients	Non-Standardized Coefficients		T	Sig.	Collinearity Statistics	
	B	Typical Error			Tolerance	FIV
(Constant)	6.283	2.315	2.713	0.008		
Self-Esteem Score	-.025	.030	-0.844	0.401	0.935	1.070
Study Habits Score	0.230	.042	5.413	.000	0.935	1.070

The results of the multiple linear regression analysis found no significant connection between university students' self-esteem and academic performance, as the linearity assumption was not fulfilled and the calculated regression model coefficient is not significant. However, a significant relationship between study habits and academic achievement among university students was evidenced by the calculated Pearson Correlation coefficient, whose value was R = 0.507, with the p-value associated with this correlation coefficient being below the level of significance ($p = .000 < \alpha = .05$). Lastly, an increase in the study habits score or an improvement in the study techniques of students of the Basic Mathematics 1 class at the School of Engineering of Universidad Tecnológica del Perú would be expected to augment their academic performance.

Discussion

The results obtained from this research reject the proposed hypothesis that university students' self-esteem is tied to their academic performance. However, it confirms the assumption that the study habits of students at the School of Engineering of Universidad Tecnológica del Perú in term 3 of the 2016 year are tied to the academic performance of university students at the School of Engineering of Universidad Tecnológica del Perú in the 3rd term of 2016.

Regarding self-esteem, it was evidenced that self-esteem levels among nearly all students (94.2%) ranged between "Average High" and "High", which means that regardless of their academic performance, students have high self-esteem. This is because the study population consisted of students most of whom have pursued technical studies in the past or are completing a second degree whose study schedule is often at night. Such results run counter to the literature reviewed, which did establish a significant connection between these two variables, this correlation positive being, direct and causal, i.e. low academic performance is caused by low self-esteem of the student (Acuña, 2013, Vildoso, 2003 and Nico , 2013). In all the studies performed, to measure the self-esteem variable, Coopersmith's Inventory was used as collection instrument. However, the study population was different, hence the difference in the results found.

On the other hand, the study habits coefficient in the calculated multiple linear regression model was significant, hence the Pearson correlation coefficient between the said variable and academic performance was calculated, which shows that there is a significant connection between study habits and academic performance of the students in the study population (R = 0.503). In addition, research determined that about 50% of students are to modify their study techniques as they are inadequate. As in here, other authors obtained similar results, such as Sanchez (2016), who found a significant and positive relationship between these two variables. Cepeda (2013) also showed that study habits exert a significant influence on academic performance. Similarly, Mendoza (2011) concludes that study habits impact academic performance, evidencing that half the students of the 2nd academic year of UNHEVAL's agronomy program used inadequate study habits, resulting in a low academic performance. Lastly, Paredes Ayrac (2008) found a high, direct positive correlation between study habits and academic performance, showing that 61% of students have inadequate study habits and only 2.8% of students have a high level of academic achievement.

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In conclusion, in the study population, self-esteem does not account for low or high academic performance, as most students reported enjoying a good level of self-esteem, regardless of their grades. However, the same is not true of study habits, which are tied to academic performance as shown by our results and prior research. Hence better performance is expected of students if their study techniques are to improve.

Therefore, it is essential for teachers to guide students through the array of study techniques available, as well as to use them to optimize the time studying to attain improved academic results. Techniques must conform to the type of student who is served by the university, as many of them work and study simultaneously or, in any event, already hold a technical or university degree. In terms of self-esteem, in the study population, improvement thereof is not an urgent matter as nearly all students claim a good level of self-esteem, hence it would be appropriate to consider other variables for future research.

Lastly, university authorities may now draw on these results to take immediate action to improve students' study habits in math classes, implement information lectures, either face-to-face or online, in light of the profile of students they serve, to increase student counselling and tutoring hours while focusing on study techniques, and last but not least, to train teachers so as to enhance their teaching skills by covering all the cognitive aspects of a student, especially in math classes.

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Appendix A: Coopersmith Inventory

Instructions:

Below is a list of statements about feelings. If a sentence describes how you feel, mark the "YES" column with an "X", that is, if you agree with the sentence. Mark the "NO" column with an "X" if you disagree with the sentence. There is no "correct" or "incorrect" sentence.

Degree: _____ Full name: _____

Code: _____ Age: _____ Sex: a) M b) F

SENTENCES	YES	NO
1. Problems usually affect me very little.		
2. I have a hard time speaking in public.		
3. If only I could change so many things about me.		
4. I can make a hard decision.		
5. I am a nice person.		
6. I get easily annoyed at home.		
7. I find it hard to get used to something new.		
8. I am popular with people my age.		
9. My parents usually take my feelings into account.		
10. I easily give up.		
11. My parents expect too much from me.		
12. I find it hard to accept myself as I am.		
13. My life is very complicated.		
14. My colleagues almost always accept my ideas.		
15. I have a bad opinion of myself.		
16. Many times I would like to leave my house.		
17. I often feel uncomfortable with my college buddies.		
18. I am less handsome or good-looking than most people.		
19. If I feel I have something to say, I usually say it.		
20. My family understands me.		
21. Others are better accepted than I am.		
22. I usually feel like my family is pushing me.		
23. I usually feel underestimated by my fellow students.		
24. I would often like to be someone else.		
25. You can trust me very little.		

26. I never worry about anything.		
27. I am sure of myself.		
28. I am easily accepted in my group.		
29. My family and I had a great time.		
30. I spend enough time imagining my future.		
31. I wish I was younger.		
32. I always do the right thing.		
33. I am proud of my performance at the University.		
34. Someone has to tell me what I have to do.		
35. I usually regret the things I do.		
36. I am never happy.		
37. I am doing my best to achieve my academic goals.		
38. I can usually take care of myself.		
39. I am quite happy.		
40. I would rather be with younger students than I am.		
41. I like everyone I know.		
42. I like when I am invited to present a topic related to the profession I study.		
43. I understand myself.		
44. No one pays me much attention.		
45. They never berate me.		
46. I'm not doing as well in college as I'd like.		
47. I can make a decision and keep it.		
48. I do not really like being young.		
49. I do not like being with other people.		
50. I am never shy.		
51. I am usually ashamed of myself.		
52. I am the center of the jokes of my colleagues.		
53. I always tell the truth.		
54. My teachers make me feel that I am not capable enough.		
55. I do not care what happens to me.		
56. I am a failure.		
57. I get easily annoyed when they scold me.		
58. All the actions I do always have to be communicated to others.		

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Annex B: Study Habits

Instructions:

The inventory of study habits will bring to light your dominant work methods in your academic life, which will help you isolate those behaviors that may be preventing greater success in your study. To achieve this, simply mark the box that best describes your particular case with an "X".

Questions	Always	Never
I. How do you study?		
1. I read what I have to study by highlighting the most important points.		
2. I underline the words whose meaning I do not know.		
3. I return to the underlined points in order to clarify them.		
4. I immediately search the dictionary for the meaning of the words I do not know.		
5. I ask myself questions and say what I have learned in my own words.		
6. Then I write in my own words what I have understood.		
7. I read each part once and repeat several times until I can say it by heart.		
8. I try to memorize what I study.		
9. I review what I have studied after 4 to 8 hours.		
10. I just give a general read to everything I have to study.		
11. I try to relate the topic I am studying with other topics already studied.		
12. I study only for exams.		

II. How do you do your homework?		
13. I read the question, I look in the book and write the answer almost as the book says.		
14. I read the question, I look in the book, I read everything and then I answer as I understood.		
15. The words that I do not understand, I write as they are in the book without finding out their meaning.		
16. I attach more importance to the order and presentation of the work than to the understanding of the subject.		
17. In my house, I lack time to finish with my work, I complete them at university by asking my friends.		
18. I ask for help from my parents or other people and let them handle all or most of the work.		
19. I leave completion of my homework until the last moment, for which reason I do not conclude them within the set time.		
20. I start to solve a job, I get tired and I move on to another.		

21. When I cannot solve a job I get angry or very angry and I give up.		
22. When I have several jobs I start with the most difficult and then I move on to the easiest one.		

III. How do you prepare for your exams		
23. I study at least two hours every day.		
24. I wait until the exam date has been fixed before I start studying.		
25. When there is oral exam, only once in the classroom do I begin to review notes.		
26. I start studying on the same day of the exam.		
27. I revise just before the exam.		
28. I prepare a plagiarism tool just in case I forget a a subject.		
29. I trust my partner to "blow" me some answers at the time of the test.		
30. I trust in my good fortune so I only study those subjects that I suppose the teacher will ask.		
31. When I have two or more exams the same day I start to study for the most difficult subject and then proceed to the easiest.		
32. I sit for my exams without having revised the whole topic.		
33. During the exam I get the topics confused and I forget what I have studied.		

IV. How do you follow your classes?		
34. I try to take notes of everything the teacher says.		
35. I only take notes of the most important things.		
36. Immediately after a class I order my notes.		
37. When the teacher uses some word that I do not know, I raise my hand and ask for its meaning.		
38. I am more attentive to the jokes of my classmates than to the class.		
39. I get tired quickly and start doing other things.		
40. When I get bored I start to play, or to talk with my friends.		
41. When I cannot take note of what the teacher says I get bored and stop everything.		
42. When I do not understand an issue my mind starts to think and daydream.		
43. My imaginations or fantasies distract me during classes.		
44. During class I am distracted by what I am going to do on the way out.		
45. During class I would like to sleep or maybe leave class.		

V. What accompanies your moments of study?		
46. I need music, be it from the radio or other means.		
47. I need the TV on.		

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48. I need tranquility and silence.		
49. I need food to eat while I study.		
50. Your family talk, watch TV or listen to music.		
51. Interruptions by parents asking for a favor.		
52. Interruptions by visits, friends, that take long.		
53. Social disruptions, parties, walks, appointments, etc.		