

How Can Procrastination Affect Academic Performance? A Case Study at the Corporación Universitaria Del Caribe (CECAR)

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Abstract: The text presented here is the product of a study carried out at the Corporación Universitaria del Caribe CECAR in response to the hypothesis of the existence of correlations between the state of procrastination and the performance of students in academic programs. One of the reasons that motivated this study was the concern of the university community in relation to the trend that has been presented by the performance below the national average in the external test Saber PRO. This benchmark is one of the indicators used by the Ministry of National Education to evaluate the quality of university academic programs in Colombia. To carry it out, the Procrastination Assessment Scale Students (PASS) by Solomon and Rothblum (1984) was used, emphasizing academic trajectory, aversion to homework, perfectionism and self-esteem as categorical variables, which was applied to 867 students from the different undergraduate programs at CECAR. The analysis of the information was done using SPSS software, version 26, with the intention of identifying the state of procrastination in the academic programs, characterizing the associativity of procrastination with the academic programs and, finally, correlating procrastination with the academic performance of the students.

The results of the analysis showed that 89.10 % of the surveyed population is procrastinating, distributed as follows: 41.80 % of the population is in a state of low procrastination, 39.70 % is in a state of medium procrastination and 7.60 % is in a state of strong procrastination. As for the second objective, the association between the state of procrastination and academic programs was demonstrated using the Mann Whitney test carried out using non-parametric variables, obtaining significance values of 0.000, which is less than 0.05, demonstrating that there are significant differences between the two variables. In addition, it was found by comparative analysis of means that the order of contribution of each of the variables evaluated on the state of procrastination: Perfectionism or fear of failure, anxiety, aversion to tasks and academic history. Finally, the third objective was achieved by determining Spearman's Rho correlation coefficient with a value of 0.243, showing correlations between procrastination and students' academic performance. This value is interpreted as the existence of positive and moderate correlations, with significance at the 0.01 level, thus proving the hypothesis that directs the research. This result reveals the need for interventions adjusted to the needs detected, i.e. fear of failure and anxiety.

Keywords: Procrastination, academic performance, correlations among variables, task aversion

1. Introduction

1.1. PROCRASTINATING BEHAVIOUR

1.1.1. Procrastination: causes and factors

Procrastination has been defined as the irrational and voluntary delay of planned tasks despite knowing that one is acting against one's own interests (Steel, 2011). This type of behavioral pattern observed in people is characterized by the temporary delay in carrying out activities that should be delivered at a certain time (Ferrari & Tice, 2007; Ferrari & Tice, 2000; Riva, 2006; Steel, 2007), cited by Quant, D.M & Sánchez, A. (2012).

Although most procrastinators perceive this behavior as problematic and inappropriate (Skowronski & Mirowska, 2013), procrastination is a problem that has become widespread in modern societies in different contexts when people are faced with tasks that they consider aversive (Sirois & Pychyl, 2013).

Regarding the findings found in studies of procrastinating behavior in organizations, it has been possible to demonstrate the negative effects on productivity and organizational development. For this reason, this individual or group behavior has been considered a competitive disadvantage for organizations because it has been found that when these behaviors are chronically present, they can be related to low self-esteem, deficits in self-confidence, deficits in self-control, depression, disorganized behavior and in some cases perfectionism, dysfunctional impulsivity and anxiety (Salomón & Rothblum, 1984; Senecal, Koestner & Vallerand, 1995; Ferrari & Tice, 2007; Spada, Hiou & Nikcevic, 2006).

Also, the study by Hsin and Nam (2005) stands out, where they point out how different research has

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determined that people who procrastinate are characterized by a deficit in self-regulation and a tendency to postpone, due to lack of time, the activities that will lead them to achieve a goal; however, procrastination does not only involve a difficulty in time management, but is a complex process that involves affective, cognitive and behavioral variables. Consistent with the above, Pittman et al. (2008) point out that people who tend to procrastinate constantly experience an intense feeling of discomfort derived from the uncertainty generated by the possibility of not completing the task in the required time, accompanied by negative feelings about the difficulty of the task and their performance.

Therefore, there is an urgent need to use parameters such as productivity in companies and the academic performance of students in educational institutions to assess atypical behavior that does not obey predictions.

1.1.2. Characteristics of procrastinators

Procrastination involves a number of factors that are related to the tendency that people may have to engage in procrastination behavior. One of the most important factors or traits that is related to procrastination is self-control (Ferrari, & Tice 2007). This trait is defined by Rachlin (2000) as the choice a person makes to engage in a behavior that will bring about consequences with greater long-term value rather than opting for a behavior that will bring about consequences that involve less short-term value; therefore, a self-controlled individual can determine short, medium and long-term goals, achieving pleasant consequences in each of them according to their objective. In this sense, people who have low levels of self-control form negative thoughts that lead to the postponement of tasks.

Other factors that determine procrastination behavior are depression and anxiety, as evidenced in the studies by Stainton, Lay and Flett (2000) where this type of symptomatology is made explicit, together with the frequent generation of negative thoughts about themselves and their perceived ability to carry out activities or commitments. Important empirical evidence is provided by Rothblum (cited by Tice and Roy, 1997) in his studies where he shows that there is a correlation between procrastination and depression, irrational beliefs, anxiety, low self-esteem and a deficit in study habits. In addition to the above evidence, the contributions of Fleet, Blanckstem and Martin (cited by Tice & Roy, 1997), who found that procrastinators show symptoms of anxiety when faced with evaluation situations, stand out.

In relation to the high levels of stress found in procrastinators, Wambach, Hansen and Brothen (2001) attribute it to facing situations in which the deadline for the delivery of tasks is close to expiring; they also show

fear of failure, symptoms of anxiety that can be significant and feelings of hopelessness due to the negative evaluation they make of their performance for the fulfilment of the task.

Williams, Stark and Fost (2008) outline other traits observed in the behavior of people who procrastinate when they argue that fear of failure, low self-efficacy and low self-competence are important factors related to procrastination. For this reason, an individual who considers that he or she does not have the skills or ability to perform a task satisfactorily is more likely to postpone performing activities that may evidence these deficiencies; engaging in procrastination behavior may then become a strategy that allows the individual not only to reduce task-related anxiety symptoms, but also to justify his or her behavior with the argument of a lack of time rather than a lack of ability.

1.1.3. Models explaining procrastinating behaviour

Procrastination has been approached from four models: psychodynamic, motivational, behavioral and cognitive (Rothblum, 1990). The psychodynamic model explains procrastination as the hope of achieving success or the fear of failure. The former refers to motivational achievement and the latter to the motivation to avoid a situation that the person values as negative. In this sense, achievement is conceived as a variable dependent on a series of factors including: the perception of difficulty, attributions about success and the levels of anxiety that can occur when there is little perceived chance of achieving success; when the fear of failure exceeds the hope of success, people prefer to choose activities in which they perceive that success is guaranteed, thus postponing those tasks that they consider difficult and in which they may fail. The second model focuses on understanding the motivations of people who fail or withdraw from academic activities despite their intelligence, abilities or readiness to succeed. In this sense, the motivational model, according to McClelland (cited by Rothblum, 1990), is based on the fact that achievement motivation is the most important trait that a person can feel in order to achieve success in any given situation; therefore, a person can opt for two positions: the hope of achieving success or the fear of failure. Regarding the latter option, Baker (cited by Rothblum, 1990) states that "procrastination can be explained as a fear of failure due to the establishment of pathological family relationships, where the role of parents has facilitated the maximization of frustrations and the minimization of the child's self-esteem".

Regarding the third model, Rothblum, Solomon and Murakami (1986) point out that in order to define procrastination it is necessary to include motivational and behavioral variables; therefore, from the behavioral

model, procrastination is defined as the choice that a person makes to carry out activities that have positive short-term consequences and avoid carrying out activities that involve delayed consequences (Ferrari and Emmons, 1995; cited by Riva, 2006), which is why people who procrastinate are immediatists and pragmatists. This statement complements the conclusions of the studies by Senécal and Guay (2000), who state that avoidance of an activity occurs because it is perceived as unpleasant compared to a series of activities that can generate higher levels of satisfaction, which implies a conflict for the person between what he or she should do and what he or she wants to do. These arguments were analyzed by Solomon and Rothblum (cited by Bui, 2007) where they state that:

The act of unnecessarily delaying a task leads the person to experience feelings of discomfort, which is why people show an avoidance pattern when faced with situations that involve a high response cost or where they assess the chances of achieving a good level of satisfaction in relation to their performance as low.

Bui (2007, p.205)

Consistent with this, Pittman, Tykocinski, Sandman Keinan and Mattherws (2008) point out that the function of procrastination is related to the inherent attractiveness of a series of tasks other than those assigned to them, leading to avoidance and aversion..

Finally, the cognitive model posits that procrastination involves dysfunctional information processing involving non-adaptive schemas related to inability and fear of social exclusion. This model posits that procrastinators generally reflect on their procrastination behavior; therefore, procrastinators are especially likely to experience obsessive thought forms when they are unable to perform an activity or when the time to submit a task is approaching (Stainton, Lay & Flett, 2000). In the process description, Stainton, Lay and Flett (2000) state that a person who usually evidences procrastination behaviors and commits to the completion of a task, subsequently begins to have ruminative thoughts related to the progress of the activity and their inability to plan or perform it, whereby negative automatic thoughts related to low self-efficacy begin to occur (Contreras, Espinosa, Esguerra, Haikal, Polaina & Rodríguez, 2005, p. 191), fear of evaluation and the perception of failure; these types of thoughts lead people to choose to postpone or abandon the task..

1.2. PROCRASTINATION IN THE EDUCATIONAL CONTEXT

1.2.1. Procrastination in university education

Academic procrastination is a complex behavior that jointly involves behavioral, cognitive and affective factors (Chun Chu & Choi, 2005).

In a review of information by Hidalgo Fuentes, S., Martínez Álvarez, I., & Sospedra Baeza, M. J. (2021) they found that the tendency to procrastinate can be favored by factors such as perceived self-competence (Hagbhin, McCaffrey & Pychyl, 2012), low self-control (Uzun, LeBlanc & Ferrari, 2020), fear of failure (Zhang et al., 2018), depression (Kınık & Odacı, 2020), low self-esteem (Hajloo, 2014) or anxiety (Spada, Hiou & Nikcevic, 2006), among others. From other studies conducted in the same context have found negative associations between academic procrastination and variables such as academic satisfaction (Balkis & Duru, 2017), intentions to continue studies (Bäulke, Eckerlein & Dresel, 2018), the use of effective learning strategies (Howell & Watson, 2007), academic engagement (Aspée, González & Herrera, 2021) and academic performance (Goroshit, 2018; Kim, Fernández, & Terrier, 2017; Kim & Seo, 2015). Although studies have been advanced that have demonstrated the multifactorial nature of procrastination behavior, resulting from the application of the instruments that have been designed and validated so far, much remains to be done to unravel the complex nature of academic procrastination, especially, the incidence of socioemotional or family factors in the formation of negative mental and academic habits.

1.2.2. The case of Corporación Universitaria del Caribe CECAR

One of the concerns of Colombian universities is the results obtained by many of their students in the external tests taken by the state to evaluate them, classify them, question them and promote processes to improve the academic quality of the programs. Many of them are being questioned because their students have had low performances in the SABER PRO test, especially in those programs that have achieved high quality accreditation by the Ministry of National Education (MEN). Internally, there have been discussions to identify and characterize the causes of low student performance, especially when reviewing the student's academic trajectory, their performance on the SABER 11 test, the context and the institution they come from. With this information, the value added by the university is determined and it has been found, on many occasions, that the contribution that the university has given to the students in their transit through its academic programs is minimal or none at all.

The analysis of all these problems has focused on three aspects:

- Attitude and expectations of students towards external testing.
- Low levels of critical reading and critical thinking of students.
- Students' procrastination

Attending to the third problematic, the research group formulated the following question:

How does the procrastination status of CECAR students correlate with their academic performances?

2. AIMS

2.1. GENERAL AIM

To analyze the existing correlations between the procrastination status of cecar students and academic performances.

2.2 SPECIFIC AIMS

- Identify the procrastination status of students in CECAR's academic programs.

- Characterize students' procrastination status with age, gender, and academic performance.

- Correlating procrastination status with students' academic performances..

3. Methodology

The study has a mixed approach. Qualitative because a particular case of complex nature is investigated, with categorical variables that are part of the procrastination test. Quantitative because a statistical analysis of the results was made, using SPSS software, version 26, to reach the descriptions, associations and correlations formulated in the specific objectives of this study. The Procrastination Assessment Scale Students (Pass, from now on) test instrument of the authors Solomon and Rothblum (1984), adapted by the research group and applied to the CECARENCE population of all undergraduate academic programs, was applied. The unintentional sample consisted of 868 students who completed the test electronically, distributed among the programs as follows:

TABLE 1. Distribution of the sample in the academic programs

Programs	Frequen ncy	Percen tage	Valid percenta ge	cumulativ e percentag e
	1	,1	,1	,1
Bachelor's Degree in Linguistics and Literature	186	21,4	21,4	21,5
Business Administration	75	8,6	8,6	30,2
Industrial Engineering	15	1,7	1,7	31,9
Architecture	18	2,1	2,1	34,0
Other	111	12,8	12,8	46,8
Law	33	3,8	3,8	50,6
Bachelor's Degree in Early Childhood Pedagogy	72	8,3	8,3	58,9
Sport science	90	10,4	10,4	69,2
psychology	51	5,9	5,9	75,1
Social work	141	16,2	16,2	91,4
systems engineering	3	,3	,3	91,7
Public accounting	36	4,1	4,1	95,9
Economy	36	4,1	4,1	100,0
Total	868	100,0	100,0	

Source: Research Team

4. Results

The first objective: To identify CECAR's procrastination status.

To achieve the first objective, the information was analyzed using SPSS software, version 26, obtaining the following descriptive statistical parameters:

TABLE 2: Descriptive statistics of the category Procrastination.

Procrastination		
N	Valid	867
	lost	1
Average		2,4429
Medium		2,0000
Mode		2,00
Standard Deviation		,78373
Variance		,614
Asymmetry		-,005
Error standard of asymmetry		,083
Kurtosis		-,427
Error standard of Kurtosis		,166
Range		3,00
Minimum		1,00
Maximum		4,00
Percentiles	25	2,0000
	50	2,0000
	75	3,0000

PASS Rating Scale (1 a 4; 1=Never, Almost never, 3=Avarage, 4= Very related)

Source: Research Team

According to the measures of central tendency observed in the previous table, there is a mean of 2.4429, with a

dispersion of less than one, in a range of 3, between 1 and 4.

The above is confirmed by the analysis of procrastination in the frequency in the range of 1 and 4, as shown in the following table:

TABLE 3. Frequency distribution in the ranges

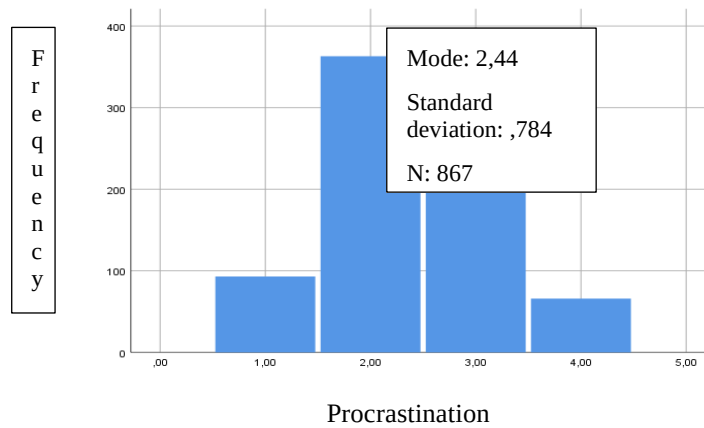
		Frecuency	Porcentage	Valid porcentage	Cumulative percentage
Valid	Nothin g	93	10,7	10,7	10,7
	few	363	41,8	41,9	52,6
	Media	345	39,7	39,8	92,4
	Very related	66	7,6	7,6	100,0
	Total	867	99,9	100,0	
Lost	System	1	,1		
Total		868	100,0		

Source: Research Team

The table above shows that 89.3% of the sample studied were procrastinating, distributed as follows: 41.8% had little procrastination, 39.7% had medium procrastination and 7.6% had very strong procrastination.

The histogram illustrating the distribution is as follows:

GRAPHIC 1. Procrastination histogram



The histogram shows an asymmetry to the right (bias), illustrating the presence of procrastination in CECAR and the frequency by range of students.

Regarding the second objective: Characterization of the state of procrastination in the academic programs of

CECAR, the following analysis was carried out, with the results shown below:

Initially, the descriptive analysis of the categorical variable age was made, obtaining the following results:

TABLE 4. Descriptive of the variable age.

YEARS		Frecuen cy	Porcent age	Valid porcent age	Cumulati ve porcentag e
Valid	15-16	12	1,4	1,4	1,4
	17-18	165	19,0	19,0	20,4
	19-20	237	27,3	27,3	47,8
	21-22	141	16,2	16,3	64,0
	23-24	75	8,6	8,7	72,7
	More than 24	237	27,3	27,3	100,0
	Total	867	99,9	100,0	
lost	System	1	,1		
Total		868	100,0		

Source: Research Team

The difference in the number of students in each age range and the significance values between the ranges, greater than 0.05, given in the Mann Whitney U test

(Table 5), confirm that there are no significant differences in the contributions of procrastination in each of the age ranges in which the sample is distributed.

TABLE 5. Mann Whitney Test

CATEGORY	AGE	N	Average rank	Sum of ranks
PROCRA STINATION	Under 20 (1)	414	452,84	187474,50
	Over 20 (2)	453	416,78	188803,50
	Total	867		

Grouping variable: Age

The test statistic for the association between procrastination and age is shown in the following table:

TABLE 6. Mann Whitney Test Statistics

U of Mann-Whitney	85972,500
W of Wilcoxon	188803,500
Z	-2,312
Asymptotic sign(bilateral)	,021
a. grouping variable: Age	

If there is an association between age and procrastination in the established age ranges (under 20 and over 20), as evidenced by a significance level of less than 0.05.

In relation to the categorical variable Sex, it was found:

TABLE 7. Descriptive of the variable Sex.

		Frecuency	Porcentage	Valid porcentage	Cumulative porcentage
Valid	Male	282	32,5	32,5	32,5
	Female	585	67,4	67,5	100,0
	Total	867	99,9	100,0	
lost	System	1	,1		
Total		868	100,0		

Source: Research Team

In the table above, it is observed that the greater number of women in the sample, determines the contribution in the procrastination status of CECAR.

Subsequently, the Mann Whitney U test was performed to look for associativity between procrastination and academic performance and it was found:

TABLE 8. Mann Whitney Test Procrastination - Academic Performance.

CATEGORY	REND_AC ADEM	N	Average	Sum of ranges
PROCRASTINATION	1	778	451,40	351188,50
	2	87	268,47	23356,50
	Total	865		
U of Mann-Whitney			19528,500	
W of Wilcoxon			23356,500	
Z			-7,072	
Asymptotic sign(bilateral)			,000	

a. Grouping variable: Academic Performance

The P-value of 0.000, which is less than 0.05, indicates that there IS a significant difference between the two categorical variables, that is, the existence of an

association between procrastination and academic performance is confirmed. If there is an association between procrastination and academic performance, taking into account that acceptable performance encompasses a level of competence that is characterized by the fact that students have had problems during the

process to overcome the challenges that define the basic competencies of the level or course. In relation to the third objective: to correlate procrastination status with academic performance, the Spearman's Rho correlation coefficient was determined, with the following results:

TABLE 9. Correlations between procrastination and academic performances.

			Procrastination	My academic performance has been acceptable
Rho of Spearman	Procrastination	Correlation coefficient	1,000	,242**
		Sig. (bilateral)	.	,000
		N	867	867
	My academic performance has been acceptable	Correlation coefficient	,242**	1,000
		Sig. (bilateral)	,000	.
		N	867	867

** . The correlation is significant at the 0.01 level (bilateral).

Spearman's Rho coefficient = 0.242, significant at the 0.01 level, indicates that the alternative hypothesis is confirmed, that is to say that there are significant relationships between the variables and there is a direct and weak correlation between them, taking into account the range of the valuations.

H0= YES there is correlation between the variables.

H1= NO correlation between the variables between the variables between the variables

In the search for the reasons that justify the presence of procrastination, correlations between the different

categories were established using Spearman's Rho analysis, and it was found:

TABLE 10. Correlations between the categories of procrastination							
			1	2	3	4	5
Rho of Spea rman	Academic habits (1)	Correlation coefficient	1,000	,188**	-,146**	-,048	-,461**
		Sig. (bilateral)	.	,000	,000	,154	,000
		N	867	867	867	867	865
	Task aversion (2)	Correlation coefficient	,188**	1,000	-,258**	-,249**	-,114**
		Sig. (bilateral)	,000	.	,000	,000	,001
		N	867	867	867	867	865

		N	867	867	867	867	865
	Perfeccioni sm3)	Correlation coefficient	- ,146**	- ,258**	1,000	,338**	,111**
Sig. (bilateral)		,000	,000	.	,000	,001	
N		867	867	867	867	865	
	Anxiety (4)	Correlation coefficient	-,048	- ,249**	,338**	1,000	-,023
Sig. (bilateral)		,154	,000	,000	.	,501	
N		867	867	867	867	865	
	Academic performanc e (5)	Correlation coefficient	- ,461**	- ,114**	,111**	-,023	1,000
Sig. (bilateral)		,000	,001	,001	,501	.	
N		865	865	865	865	865	
**. Correlation is significant at the 0.01 level (bilateral).							

The table shows inverse correlations of medium magnitude (-0.461) between habits and academic performance, related to the loss of the year in previous levels of schooling and problems in reaching or surpassing the level of acceptable performance in college. The same happens with the categorical variables anxiety and perfectionism correlated inversely with a slightly weaker magnitude (0.338) than the previous ones, indicating that the higher the anxiety the less perfectionism in the procrastinating behavior of the students. A correlation is also observed between task aversion and perfectionism (-0.258), which justifies the non-delivery or untimely delivery of tasks is due to the student's search to improve their products without having the conceptual clarity to do so or because of poor time management. Finally, there is a correlation between anxiety and task aversion (-0.249), which indicates that the higher the level of anxiety, the lower the fulfillment of academic tasks.

5. Discussion

In the educational context, few studies have been conducted on the personal and institutional consequences of procrastinating behavior on the achievement of goals of high academic impact. In the case of university students who are evaluated both internally and externally, there should be a logical correspondence between these results. But, when this does not occur, as in the case of some Colombian universities, specifically CECAR, predictions cannot be made based on good internal results but low external results, as has happened in the last 5

years in the Saber PRO test (ICFES, 2022). This reason justifies the study conducted, finding procrastinating behavior in the sample. According to the analysis performed, the presence of more women than men in the sample outlines their greater contribution in the result, considering that the largest number of students evaluated were from the academic programs of social work, psychology and child pedagogy, where the largest population is female. In relation to the established age ranges, there are no significant differences in the contribution of procrastination among them, as it appears in table (5), so there is procrastination in the ranges from 15 to 20 as in those older than 20 years.

Regarding the correlations observed between the state of procrastination and academic performance, the existence of this behavior in such a high percentage (89.3%) is worrisome for a university, especially if it makes its predictions in the programs or at the institutional level based on these two references: Internal academic results and the background of external tests, especially Saber 11. If the predictions are not fulfilled as in the case at hand, answers are sought by attending to the PASS subcategories such as academic habits, aversion to tasks, anxiety and perfectionism. In this sense, significant correlations were found between academic habits and task aversion, task aversion and anxiety, anxiety and perfectionism, task aversion and perfectionism (Table 9). The incidence of academic habits such as losing subjects at the primary and secondary level, and having academic averages below average in the competencies achieved, are characteristics of a student who has become

accustomed to winning courses without much effort and this is reflected in the poor results in the Saber 11 test (Table 9). This behavior is more accentuated at university, where it is evident in the fulfillment of academic tasks and in their quality. Consequently, the existence of correlations between task aversion and perfectionism confirms the thesis of Riva (2006), who points out that procrastination occurs because people decide to perform activities that have positive short-term consequences instead of carrying out those that imply delayed consequences, which affects the quality of the tasks, i.e., they work only to comply, not to learn, and much less to transcend. Another explanation for the non-compliance with academic tasks of the procrastinated person follows the motivational line in which Senécal and Guay (2000) state that the avoidance of performing an activity occurs because it is perceived as unpleasant compared to other more pleasurable ones, which implies a conflict for the person between what he/she should do and what he/she wants to do. This behavior becomes automatic and over time becomes an academic habit and is considered by procrastinators as a normal behavior. Another argument that explains the effect of academic habits on procrastination is shown by Stainton, Lay and Flett (2000), who state that a person who usually evidences procrastination behaviors and commits to the completion of a task, subsequently begins to have ruminative thoughts related to the progress of the activity and his inability to plan or perform it, so that negative automatic thoughts related to low self-efficacy begin to appear, that is, he continuously thinks about not being able to do the activity and looks for other mechanisms to accomplish it. This same observation is confirmed in the studies of Williams, Stark and Fost (2008), adding fear of failure to the factors of low self-efficacy and low self-competence in determining the behavior of a procrastinator. These factors are reflected in this study where significant correlations were found between academic habits, task aversion, anxiety levels and perfectionism. According to the findings, the stereotype of the student who participated in the study is constructed. From it, it is observed that the greatest contribution to procrastinating behavior in the fulfillment of tasks and therefore the affectation in academic performance is due to negative academic habits and in lesser contribution to anxiety and perfectionism. From the behavioral model, negative mental and academic habits are formed throughout the student's life, who gets used to doing the tasks that demand the least effort and provide the most pleasure. In this process, leaving complex tasks for the last moment generates greater anxiety (Rezaei-Gazki, P., Ilaghi, M., & Masoumian, N., 2024). From this moment on, the cognitive model explains the process that leads to the decision making process of a person who has overestimated the

complexity of the task, choosing not to deliver it or to do it to comply, without caring about the quality or send it to be done, without causing discomfort. This vicious circle or inertial tendency is worsened when negative self-thoughts are generated automatically. The relevance of the interventions will be aimed at improving the levels of self-esteem and self-control of all students (Meirav, H., & Marina, G. 2020), learning strategies to manage time and available information. All this process should be in function of improving the levels of self-regulation and autonomy of the student.

6. Conclusions

There is procrastination in 89.3% of the sample studied, distributed as follows: little 41.8%, medium 39.7% and very strong 7.6%. Due to the difference in the number of students in each age range and the significance values between the ranges, greater than 0.05, given in the Mann Whitney U test, it is confirmed that there are no significant differences in the contributions of procrastination in each of the age ranges in which the sample is distributed. This behavior is repeated when analyzing the categorical variable sex, finding that the number of women is greater than that of men in the sample.

There is a direct and weak correlation between procrastination and the academic performance of CECAR students, as confirmed by Spearman's Rho coefficient = 0.242, significant at the 0.01 level, taking into account the range of the evaluations. According to the findings, the stereotype of the student who participated in the study is constructed. It was observed that the greatest contribution to procrastinating behavior in the fulfillment of tasks and therefore the affectation in academic performance is due to negative academic habits and, to a lesser extent, to anxiety and perfectionism.

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