

Procrastination in High School Students in Times of COVID-19, Lima-Perú: A Psychological Respective

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Abstract

Objective: To measure the degree of procrastination and the reasons why high school students from an educational institution in the district of San Juan de Lurigancho procrastinated in times of pandemic. **Methodology:** Quantitative, comparative and relational with cross-sectional design. A total of 377 students of both sexes from 2nd to 5th year of secondary school participated in the study. **Results:** The association between sex and procrastination showed that females tend to procrastinate more (64.7%) than males (47.9%); although in both cases the tendency to procrastinate is medium. However, the high comparison is also related to females. Of the total number of students, 56.2% tend to medium procrastination. The association of Grade and procrastination showed that Grade 3 students tend to higher procrastination (63.3%) than the other grades. 56.2% tend to medium procrastination. **Conclusions:** Females tend to procrastinate more than males due to lack of energy and self-control and low assertiveness and confidence. Grade 3 students procrastinate more than the other grades and there are significant differences in academic procrastination between these groups.

Keywords: Procrastination, high school students, COVID-19, academic procrastination.

1. Introduction

Based on its etymology, academic procrastination from the perspective of Cotera & Matamoros (2021) consists of "postponing" an activity for later, and that these postponements of tasks are replaced by others without major importance or that are attractive to the procrastinator. In the same way, this pattern of behavior is considered in that individual who postpones long-term obligations or tasks; there are studies that prove that procrastination is allied with various factors (Blunt & Pychyl, 2000) with the low self-esteem of the person (Abdi Zarrin et al., 2020) and emotional problems causing academic problems or in their daily activities (Steel, 2007; Wolters, 2003; Atalaya & García, 2019; Malaga, 2022).

An important aspect of life affected by homework procrastination is academic, especially in high schools and universities (Solomon & Rothblum, 1984). This area of procrastination is much researched because statistical figures indicate that the age group most likely to procrastinate are adolescents and young people (Barreto, 2015; Ferrari et al., 2007). In this regard, Quant & Sánchez (2012), allude that in Latin America 61% of people procrastinate while 20% experience it chronically, accentuating this problem in students, confinement by COVID 19, and distance education (Silva-Arocha et al., 2020; Córdova et al., 2022) neglecting their schoolwork and social relationships (Yana et al., 2019; Del Toro et al., 2019), affecting academic performance (Álvarez, 2010). Some authors even report that procrastinating is becoming a lifestyle in which delaying academic tasks is considered a habitual activity (Busko, 1998).

Likewise, Zambrano et al. (2022) mention that procrastinators have not managed to regulate, reaching in many cases school dropout. While Díaz-Morales (2019), they refer that procrastination is affected by poor time management, affective processes, cognitive processes and that it complains to 25% of the community, not presenting their academic works in the required time.

For the variable procrastination, the theory of temporal motivation (Steel & König, 2006) was considered, which considers that the student in front of the realization of school tasks, can accept two positions; the fear of failing, being its motivational factor that of avoidance and on the other hand the option of succeeding that includes the

motivation of achievement; this possibility depends on other variables such as difficulties, The anxiety to achieve success, prevent the realization of activities. The outline of this position indicates that academic procrastination will be assumed by a diminished low, diminished self-confidence, poor planning and poor time management (Rodriguez & Alfaro, 2022; Arteaga et al., 2022).

Regarding the type of procrastinators, the authors are mentioned (Solomon & Rothblum, 1984; Tice & Baumeister, 1997; Solferino, 2012) for whom procrastination is negative, unadaptive; in addition, they mention the existence of two kinds of academic procrastination: functional and dysfunctional. For Ferrari (1994), functional procrastination is intentional, acceptable, premeditated, strategic, by postponing activities of minor importance and the student strategically and planned fulfills these tasks improving their academic performance. Procrastinating is harmful and non-functional since it produces an increase in the student's spirit, by not completing the tasks responsibly and this can generate emotional and physical affections (Marković et al., 2021; Serdar et al., 2021; Magalhães et al., 2020).

According to Carbajal et al. (2022), in times of pandemic, procrastination became evident in high school students since confinement altered their physical environment and social interaction. In this regard, Padilla & Pan (2021) mentioned that the pandemic generated very high levels of stress in students, who saw their education deeply affected and this can modify levels of procrastination in students mainly at the secondary level (Quispe, 2020).

In addition, Xu (2021) mentioned that during the pandemic schools around the world adopted distance learning, which presents great challenges for high school students is so online education gives students great flexibility and autonomy, that students tend to use the time they would have spent studying in other activities that reflect daily and that is why when they learn with tools They also face the temptations of the Internet. They also need to have more self-management and motivation skills to resist being distracted; With online learning, in this way, there seems to be an increase in passive academic procrastination.

In addition, for Rahimi & Vallerand (2021), the shift to online learning from home can make it difficult to achieve work-life balance by creating additional conditions for procrastination. While at home in their spare time, students watch TV, read, write, play games, and search for information about the pandemic online. Also, on online learning, for (Alih & Alvarez, 2021; Lin et al., 2021) high school students carry out the learning process through an online and modular approach which increases the postponement of schoolwork. While Pelikan et al. (2021), established relationships between procrastination, self-regulated learning and motivation in high school students in Austria, during COVID-19. On the other hand, Çetin & Ceyhan (2018) studied the relationship between academic procrastination of high school students and anxiety, self-regulation and academic performance in high school students in Turkey.

On the other hand, Turel & Dokumaci (2022) established the relationship between adolescents' misuse of social networks, their academic procrastination behavior and academic performance; concluding that the abuse of virtual communities and the technology of the students makes the behavior of academic postponement negatively affect their school performance.

Zhang et al. (2022) mention that students with low self-esteem may be more procrastinators by showing low self-efficacy in schoolwork. As mentioned, Zarrin et al. (2020) and Zarrin et al. (2020) found that fear of failure is associated with greater delay in completing schoolwork and with low self-esteem, evidencing a negative association between fear of failure and academic procrastination.

Guerra de Assayag (2020) established an investigation with the objective of verifying how the dependence on social networks and self-esteem influence the autonomy of learning, in 5th grade students, in Lima. The research, applied, with non-experimental, cross-sectional, correlational-cause I design was applied to 209 participants who were evaluated with their respective questionnaires; concluding that self-esteem and abuse of networks influence learning autonomy by 14.4% in these students.

About the dimensions of inconstant procrastination, Solomon & Rothblum (1984) refer that there are five: Search for excitement, lack of energy and self-control, perfectionism, anxiety to evaluation and finally, little assertiveness and confidence. In this regard, they found that negative emotions, perfectionism and anxiety to the evaluation intentionally delays some learning tasks that must be completed without taking into account the possible adverse consequences that are caused within the Covid-19 pandemic. Thus, it poses the challenges globally about adolescent students of the secondary level that is carried out in the pandemic where this can increase the procrastination of tasks that a student does not like due to the pandemic (Tezer et al., 2020).

Evaluation anxiety refers to anticipatory and negative aversion and fear of being evaluated and feeling of fear of the consequences of one's own fear symptoms. That is, the student is anxious before being evaluated and for variables like this is that procrastination is investigated from the negative or maladaptive concept (Kim & Seo, 2015).

Perfectionism is the propensity to sit and embrace lofty, utopian purposes (Hewitt & Flett, 1991). It constitutes a dimension related to the delay in the re-azation of academic tasks (Ayadi et al., 2021; Saltürk, 2022) (Saltürk, 2022) especially because it was previously considered wise to practice procrastination (J. R. Ferrari et al., 1995) and because considerable researchers analyze procrastination with the theory of the five factors of personality (McCrae et al., 2013; Steel, 2007; Steel et al., 2018).

In this regard, Onwuegbuzie (2004), when studying perfectionism in procrastination, revealed that procrastifiers proceed more out of a fear of erring than out of the desire to achieve a goal while Çapan (2010), asserts that although much of the literature on perfectionism is related to negative aspects such as Procrastination, low self-esteem, anxiety and depression, these allow to have better internal control, make better decisions, discipline and aspirations to achieve success.

The "low assertiveness and confidence" implies the feeling of lack of skills to solve situations successfully or lack of social skills in the search for information to perform academic tasks satisfactorily, also means that students do not have the confidence and maturity to ask for information or support when they need it (Garzón & Gil, 2017).

The objective of this research was to compare the tendency to procrastination of high school students in a public school in Lima, Peru in a context of COVID-19.

Methodology

It used a quantitative, comparative and relational methodology with a cross-sectional design. Participants were 377 high school students from Lima, Peru, 190 men (50.4%) and 187 women (49.6%). The participants of 2nd (102); 3rd (109), 4th (185) and 5th (82) grade of a public school in Lima were evaluated with the questionnaire of Solomon and Rothblum (1984) consisting of 26 items that inquire about the cognitive and behavioral causes to postpone the tasks. The answer alternatives are presented in 1 at the Likert scale with a value of 1 to 5 from never=1 to always=5. The procedure began by recruiting students from the educational institution to which they belonged. Subsequently, the respective informed consent documents were signed after requesting their collaboration in this research. Quantitative analysis was performed once the instrument was ready and the data were complete.

2. Results

The information collected was processed, from which descriptive data was obtained by associating sex and degree of education with procrastination and its dimensions; in addition, inferential information was made using the U tests of Man Whitnet and Kruskal Wallis.

Table 1

Procrastination by sex and degree of studies of sendaria.

			Academic procrastination			Total
			Casualty	Stocking	Loud	
Sex	Woma	Recount	51	121	15	187
		%	27,3%	64,7%	8,0%	100,0%
	Man	Recount	93	91	6	190
		%	48,9%	47,9%	3,2%	100,0%
	Total	Recount	144	212	21	377
		% Procrastination	38,2%	56,2%	5,6%	100,0%
Degree	2nd	Recount	46	51	5	102
		%	45,1%	50,0%	4,9%	100,0%
	3rd	Recount	29	69	11	109
		%	26,6%	63,3%	10,1%	100,0%
	4th	Recount	37	44	3	84
		%	44,0%	52,4%	3,6%	100,0%

5th	Recount	32	48	2	82
	%	39,0%	58,5%	2,4%	100,0%
Total	Recount	144	212	21	377
	% Procrastination	38,2%	56,2%	5,6%	100,0%

The percentage information in the table above indicates that 56.2% (212) of students tend to procrastinate at a medium level; 38.2%(144) at a low level and 5.6% (21) at a high level. The association of sex and procrastination showed that women tend to procrastinate more (64.7%) than men (47.9%); although in both cases the tendency to procrastination is average. However, high procrastination is also related to women (8% vs. 3.2%).

On the other hand, when contrasting the degree with the level of procrastination, it is evident that the tendency to procrastination of the four degrees of study is at the medium level; 50.0%(51) 2nd grade; 63.3%(69) 3rd grade; 52.4%(44) 4th grade and 58.5%(48) 5th grade ; likewise, 3rd graders are more likely to procrastinate.

Table 2

Dimension "search for excitement" of procrastination by sex and degree of education.

			Excitation search			Total
			Casualty	Stocking	Loud	
Sex	Woma	Recount	106	78	3	187
		%	56,7%	41,7%	1,6%	100,0%
	Man	Recount	108	77	5	190
		%	56,8%	40,5%	2,6%	100,0%
	Total	Recount	214	155	8	377
		% Procrastination	56,8%	41,1%	2,1%	100,0%
Degree	2nd	Recount	59	41	2	102
		%	57,8%	40,2%	2,0%	100,0%
	3rd	Recount	55	49	5	109
		%	50,5%	45,0%	4,6%	100,0%
	4th	Recount	52	32	0	84
		%	61,9%	38,1%	0,0%	100,0%
	5th	Recount	48	33	1	82
		%	58,5%	40,2%	1,2%	100,0%
	Total	Recount	214	155	8	377
		% Procrastination	56,8%	41,1%	2,1%	100,0%

In reference to the "search for arousal" dimension of procrastination, it is observed that 56.8%(214) are at a low level; 41.1%(155) at the medium level and 2.1%(8) at the high level. On the other hand, when associating sex with the dimension "search for arousal" of procrastination, it was observed that 56.8% (214) corresponded to the low level; 41.1% (155) were at the medium level and 2.1% (8) at the high level. In addition. It was evident that both women (56.7%) and men (56.8%) were at the low level of "excitement seeking"; while 41.7% (77) of women and 40.5% (77) of men were located in the middle level of this dimension.

In addition, the association between the degree of study and the dimension "search for excitement" showed indications that the trend was towards a low and medium search for excitement for the four grades, as shown in Table 2.

Table 3

Dimension "lack of energy and self-control" of procrastination associated with sex and level of education.

			Lack of energy and self-control			Total
			Casualty	Stocking	Loud	
Sex	Woma	Recount	78	95	14	187
		%	41,7%	50,8%	7,5%	100,0%

Degree	Man	Recount	108	73	9	190
		%	56,8%	38,4%	4,7%	100,0%
	Total	Recount	186	168	23	377
		% Procrastination	49,3%	44,6%	6,1%	100,0%
	2nd	Recount	57	38	7	102
		%	55,9%	37,3%	6,9%	100,0%
	3rd	Recount	45	54	10	109
		%	41,3%	49,5%	9,2%	100,0%
	4th	Recount	41	38	5	84
		%	48,8%	45,2%	6,0%	100,0%
	5th	Recount	43	38	1	82
		%	52,4%	46,3%	1,2%	100,0%
	Total	Recount	186	168	23	377
		% Procrastination	49,3%	44,6%	6,1%	100,0%

Regarding the dimension "lack of energy and self-control " of procrastination, there is evidence that 49.3%(186) of the students are at a low level; 44.6% (168) at the middle level and 6.1%(23) at a high level of lack of energy and self-control. The percentage information on the association between sex and the dimension "lack of energy and self-control" of procrastination showed that 41.7% (78) of women and 56.8% (108) of men were at the low level; Likewise, 50.8% of women (95) and 38.4% (73) of men reported having a lack of energy and medium self-control; while 7.8% (14) of women and 4.7% (9) said they had a high level of "lack of energy and self-control".

When associating the degree of study s and the "lack of energy and self-control" it is observed that the highest percentage of students of 2nd (55.9), 4th (48.8%) and 5th (52.4%) manifest that they have a low lack of energy and self-control to procrastinate; likewise, both students of 2nd (37.3%), 3rd (49.5%), 4th (45.2%) and 5th (46.3%) consider that they have a medium level of lack of energy and self-control to procrastinate; Only 22 of the 377 participants are able to have enough energy and self-control to procrastinate.

Table 4

"Perfectionism" dimension of procrastination associated with sex and level of education.

			Perfectionism			Total
			Casualty	Stocking	Loud	
Sex	Woma n	Recount	34	71	82	187
		%	18,2%	38,0%	43,9%	100,0%
	Man	Recount	63	85	42	190
		%	33,2%	44,7%	22,1%	100,0%
	Total	Recount	97	156	124	377
		% Procrastination	25,7%	41,4%	32,9%	100,0%
Degree	2nd	Recount	23	45	34	102
		%	22,5%	44,1%	33,3%	100,0%
	3rd	Recount	21	45	43	109
		%	19,3%	41,3%	39,4%	100,0%
	4th	Recount	31	29	24	84
		%	36,9%	34,5%	28,6%	100,0%
	5th	Recount	22	37	23	82
		%	26,8%	45,1%	28,0%	100,0%
	Total	Recount	97	156	124	377
		% Procrastination	25,7%	41,4%	32,9%	100,0%

Of the total number of students, 25.7% have low perfectionism ; 41.4% show medium perfectionism and 32.9% have high perfectionism. Of the 187 female students, 18.72% have low perfectionism , 38.0% are associated with medium perfectionism and 43.9% are associated with high perfectionism . Of the 190 male students, 33.2% have low perfectionism , 44.7% are associated with medium perfectionism and 22.1% are associated with high perfectionism. In general, it is observed that women tend to high and medium perfectionism; while men tend to low and medium perfectionism.

On the other hand, when associating the degree of studies with the dimension "perfectionism" of procrastination, it is observed that the four degrees tend in general to medium and high perfectionism.

Table 5

Association between sex and degree of education with the dimension "atthe height of evaluation" of procrastination.

			Evaluation anxiety			Total
			Casualty	Stocking	Loud	
Sex	Woma	Recount	19	75	93	187
		%	10,2%	40,1%	49,7%	100,0%
	Man	Recount	50	81	59	190
		%	26,3%	42,6%	31,1%	100,0%
	Total	Recount	69	156	152	377
		% Procrastination	18,3%	41,4%	40,3%	100,0%
Degree	2nd	Recount	25	41	36	102
		%	24,5%	40,2%	35,3%	100,0%
	3rd	Recount	9	41	59	109
		%	8,3%	37,6%	54,1%	100,0%
	4th	Recount	21	30	33	84
		%	25,0%	35,7%	39,3%	100,0%
	5th	Recount	14	44	24	82
		%	17,1%	53,7%	29,3%	100,0%
	Total	Recount	69	156	152	377
		% Procrastination	18,3%	41,4%	40,3%	100,0%

Of the total number of students; 41.4% (156) tend to a medium level of anxiety to evaluation; 40.3% (152) high level and 18.3% (69) low anxiety to evaluation. On the other hand, it is observed that 40.1% (75) of women consider that their anxiety is average before the evaluation, while 49.9% (93) their anxiety is high, on the other hand, 42.6% (81) of men consider that their anxiety before the evaluation is average and 31.1% (59) consider that anxiety before the evaluation is high.

When contrasting the degree of studies and anxiety before the evaluation, 3rd grade students are the ones who have the highest percentage of anxiety before the evaluation, with 54.1% in the high level and 37.6% in the middle level ; followed by 5th grade students with 53.7% in the middle level and 29.3% in the high level. In general, it is observed that students are anxious about the evaluation, hovering between the medium and high level.

Table 6

Association between sex and degree of study with the dimension "poca assertiveness and confidence".

			Low assertiveness and confidence			Total
			Casualty	Stocking	Loud	
Sex	Woma	Recount	70	85	32	187
		%	37,4%	45,5%	17,1%	100,0%
	Man	Recount	102	70	18	190
		%	53,7%	36,8%	9,5%	100,0%
	Total	Recount	172	155	50	377
		% Procrastination	45,6%	41,1%	13,3%	100,0%
Degree	2nd	Recount	50	40	12	102
		%	49,0%	39,2%	11,8%	100,0%
	3rd	Recount	40	43	26	109
		%	36,7%	39,4%	23,9%	100,0%
	4th	Recount	42	35	7	84
		%	50,0%	41,7%	8,3%	100,0%
	5th	Recount	40	37	5	82
		%	48,8%	45,1%	6,1%	100,0%

Total	Recount	172	155	50	377
	% Procrastination	45,6%	41,1%	13,3%	100,0%

The information related to the dimension "low assertiveness and confidence" of procrastination reveals that 45.6% (172) are located in the level of low assertiveness and confidence; 41.1% (155) in the medium level and 13.3% (50) in the high level of "low assertiveness and confidence". In addition, when associating sex and the dimension "little assertiveness and confidence" of procrastination, it is evident that both women and men are located in the low and medium levels. In the same way, when associating the degree of studies and the "little assertiveness and confidence" according to the degree, it is evident that the highest percentage of students in four grades tend to be located in the lower middle levels of "little assertiveness and confidence" to perform the tasks.

Mann-Whitney test

H₀: No significant difference was found in academic procrastination between students of both sexes.

H_a: A significant difference was found in academic procrastination between students of both sexes.

Table 7

Sex and Procrastination Correlation Test and Whitney Mann U Test

Ranges					Contrast statistics ^a			
					Academic procrastination			
	Sex	N	Average range	Sum of ranges	U of Mann-Whitney	W of Wilcoxon	Z	Asympt. sig. (bilateral)
Academic procrastination	Female	187	213,86	39991,00	13117,000	31262,000	-4,395	,000
	Male	190	164,54	31262,00				
	Total	377						

to. Grouping variable: Gender

According to the statistical information of the previous table, significant differences were found between the sexes in relation to the procrastination with a level of significance of 99% and a margin of error of 1% according to the Mann-Whitney U test.

Kruskal-Wallis test

Hypothesis

H₀: No significant differences were found in academic practising between pupils in grades 2, 3, 4 and 5.

H_a: Significant differences were found in academic performance among students in grades 2, 3, 4 and 5.

Table 8

Rank test and Kruskal-Wallis statistics for the purchase of procrastination according to the degree of studies.

Ranges				Contrast statistics ^{a,b}		
				Academic procrastination		
	Degree	N	Average range	Chi-square	GI	Asympt. sig.
Academic procrastination	2nd	102	176,30	14,594	3	,002
	3rd	109	222,39			
	4th	84	178,46			
	5th	82	171,21			
	Total	377				

to. Kruskal-Wallis test

b. Grouping variable: Degree

From the previous information it is assumed that the value of the Chi-square test statistic=14.594 and a $p=0.002$ less than 0.05. We can conclude that significant differences were found in academic procrastination among students in 2nd, 3rd, 4th and 5th grade with a confidence level of 99%.

3. Discussion

The degree of procrastination and the reasons why the students procrastinated were measured, for this the relationships between sex and procrastination and sex with each of the causal factors of said procrastination were demonstrated; as well as degree of study and procrastination and degree of study with each of the causal factors of procrastination.

The association of sex and procrastination showed that women tend to procrastinate more (64.7%) than men (47.9%). This result is contrasted with the studies of Solomon and Rothblum (1984) and Ferrari, (2007) and with other studies such as those of Steel (2007) who found differences in the frequency of procrastination between both sexes but in this case men tended to procrastinate more than women.

Women procrastinate more than men mainly due to lack of self-control and energy and poor confidence and assertiveness in their abilities to do their tasks well unlike men who tend to procrastinate due to perfectionism and distress and anxiety to evaluations because they may feel overwhelmed by not being able to prioritize academic tasks or by situations in which they will be valued that causes them stress and thus postpone their schoolwork, this was arranged by Estremadoiro & Schulmeyer (2021) by finding an average level of procrastination among students.

Students in the 5th grade tend to be more inclined to evaluate than the other grades and the ladies have a greater tendency to anxiety to the evaluation and show a profile prone to procrastination than the men, this coincides when contrasting the results of the Mendez studies (2023) who also found an important association between the dimensions of academic procrastination (search for arousal, lack of energy and self-control, perfectionism) and state anxiety.

The association of Degree and procrastination showed that students of the 3rd Grade tend to have a greater postponement (63.3%) than the other grades. However, the high comparison is also related to the 3rd Grade (10.1%). 56.2% tend to a medium procrastination.

These 3rd Grade students had mainly as reasons for procrastinating "procrastination by excitement" which includes reasons for seeking activation through procrastination and rebellion and a "lack of energy and self-control" emotional includes reasons regarding time management, laziness in front of tasks, a decrease in tolerance to frustration and social dependence.

5. Conclusions

It can be concluded in this research that ladies tend to procrastinate more than men at the secondary level, with significant differences between female and male participants in relation to procrastination.

Women tend to procrastinate more because of a lack of self-control and energy and poor confidence and assertiveness in their abilities to perform their academic tasks. While boys tend to procrastinate due to perfectionism and preoccupation with academic evaluations.

Students in Grade 3 tend to procrastinate more than other grades of study at the school, with significant differences in academic performance among students in Grade 2, 3, 4 and 5.

Finally, the findings obtained indicate that it is necessary to reinforce from schools measures that help students become aware of the eradication of this behavior hoping to overcome it as the epidemiological conditions of the country improve while adapting to the new normal.

References

1. Alih, N.-I., & Alvarez, A. (2021). Academic Procrastination: Its Effect on the Learning Productivity of Senior High School Students in Mindanao State University-Sulu. *Indonesian Community Empowerment Journal*, 1(2), 70–91. <https://doi.org/https://doi.org/10.37275/icejournal.v1i2.14>
2. Alvarez, O. (2010). General and academic procrastination in a sample of high school students from metropolitan Lima. *Person*, 159–177.
3. Ayadi, N., Pireinaladin, S., Shokri, M., Dargahi, S., & Zarein, F. (2021). Investigating the mediating role

- of procrastination in the relationship between positive and negative perfectionism and mobile phone addiction in gifted students. *Iranian Journal of Psychiatry*, 16(1), 30–35. <https://doi.org/10.18502/ijps.v16i1.5375>
4. Barreto, M. E. (2015). *Relaxation in states of anxiety and procrastination in entrants to the faculty of social sciences 2015* [Universidad Nacional Mayor de San Marcos]. http://cybertesis.unmsm.edu.pe/bitstream/handle/20.500.12672/4543/Barreto_em.pdf?sequence=1&isAllowed=y%0Ahttp://cybertesis.unmsm.edu.pe/bitstream/cybertesis/4543/1/Barreto_em.pdf
 5. Blunt, A. K., & Pychyl, T. A. (2000). Task aversiveness and procrastination: A multi-dimensional approach to task aversiveness across stages of personal projects. *Personality and Individual Differences*, 28(1), 153–167. [https://doi.org/10.1016/S0191-8869\(99\)00091-4](https://doi.org/10.1016/S0191-8869(99)00091-4)
 6. Busko, D. (1998). Causes and consequences of perfectionism and procrastination: a structural equation model. *University of Guelph*, 1–55.
 7. Çapan, B. E. (2010). Relationship among perfectionism, academic procrastination and life satisfaction of university students. *Procedia - Social and Behavioral Sciences*, 5, 1665–1671. <https://doi.org/10.1016/j.sbspro.2010.07.342>
 8. Carbajal, J., Salazar, M., & Cadenillas, V. (2022). Incidence of procrastination on students' academic self-efficacy in times of COVID-19. *Horizons. Journal of Research in Educational Sciences*, 6(22), 194–202. <https://doi.org/https://doi.org/10.33996/revistahorizontes.v6i22.327>
 9. Çetin, N., & Ceyhan, E. (2018). Lise öğrencilerinin akademik erteleme davranışlarının sürekli kaygı, akılcı olmayan inanç, öz düzenleme ve akademik başarı ile ilişkisi. *Hacettepe Eğitim Dergisi*, 33(2), 460–479. <https://doi.org/10.16986/HUJE.2017028261>
 10. Coteria, A., & Matamoros, M. (2021). School social climate and academic procrastination in adolescents of a Private Educational Institution of secondary level of Huancayo, 2020. In *Universidad Peruana Los Andes*. Universidad Peruana Los Andes.
 11. Díaz-Morales, J. (2019). Procrastination: A review of scales and correlates. *Revista Iberoamericana de Diagnostico y Evaluacion Psicologica*, 51(2), 43–60. <https://doi.org/10.21865/RIDEP51.2.04>
 12. Estremadoiro, B., & Schulmeyer, M. (2021). Academic procrastination in university students. *Contributions*, 30, 51–65.
 13. Ferrari, J. (1994). Dysfunctional procrastination and its relationship with self-esteem, interpersonal dependency, and self-defeating behaviors. *Personality and Individual Differences*, 17(5), 673–679. [https://doi.org/https://doi.org/10.1016/0191-8869\(94\)90140-6](https://doi.org/https://doi.org/10.1016/0191-8869(94)90140-6)
 14. Ferrari, J., Díaz, J., O'Callaghan, J., Díaz, K., & Argumedo, D. (2007). Frequent behavioral delay tendencies by adults: International prevalence rates of chronic procrastination. *Journal of Cross-Cultural Psychology*, 38(4), 458–464. <https://doi.org/10.1177/0022022107302314>
 15. Ferrari, J. R., Johnson, J. L., & McCown, W. G. (1995). *Procrastination and Task Avoidance*. Plenum Press. <https://doi.org/10.1007/978-1-4899-0227-6>
 16. Garzón, A., & Gil, J. (2017). Psychometric properties of the Spanish version of the Procrastination Assessment Scale-Students (PASS) test. *Revista Iberoamericana de Diagnostico y Evaluacion Psicologica*, 1(43), 149–163. https://doi.org/10.21865/RIDEP43_149
 17. Assayag's War, E. M. (2020). *Addiction to social networks and self-esteem in learning autonomy in 5th grade students, Lima-2022* [César Vallejo University]. <https://repositorio.ucv.edu.pe/handle/20.500.12692/94326>
 18. Hewitt, P., & Flett, G. (1991). Perfectionism in the Self and Social Contexts. *Journal of Personality and Social Psychology*, 60(3), 456–470.
 19. Malaga, B. (2022). Motivation and academic procrastination in high school students of a psychological clinic in the district of Puente Piedra, 2021. In *César Vallejo University*. César Vallejo University.
 20. Marković, Z., Stoilkovska, B. B., & Nedeljković, J. (2021). Procrastination and working styles in high school students: Does gender moderate this relationship? *Psychological Thought*, 14(1), 94–114. <https://doi.org/10.37708/psyc.v14i1.545>
 21. Mendez, C. (2023). *Academic procrastination and anxiety in times of COVID-19 in secondary school students in public and private educational institutions, Lima 2022*. 1–79.
 22. Onwuegbuzie, A. J. (2004). Academic procrastination and statistics anxiety. *Assessment and Evaluation in Higher Education*, 29(1), 3–19. <https://doi.org/10.1080/0260293042000160384>
 23. Padilla, C., & Pan, E. (2021). Procrastination in Upper School Female Students at a New York City Private School Before and During the Coronavirus Pandemic of 2019. *Journal of Student Research*, 10(1), 1–6. <https://doi.org/https://doi.org/10.47611/jsrhs.v10i1.1284>
 24. Pelikan, E., Lüftenegger, M., Holzer, J., Korlat, S., Spiel, C., & Schober, B. (2021). Learning during COVID-19: the role of self-regulated learning, motivation, and procrastination for perceived

- competence. *Zeitschrift für Erziehungswissenschaft*, 24(2021), 393–418. <https://doi.org/10.1007/s11618-021-01002-x>
25. Quant, D. M., & Sánchez, A. (2012). Procrastination, Academic Procrastination: Concept and Implications. *Revista Vanguardia Psicológica*, 3(1), 45–59. http://www.academia.edu/10370305/PROCRASTINACIÓN_PROCRASTINACIÓN_ACADÉMICA_CONCEPTO_E_IMPLICACIONES
26. Quispe, C. (2020). Academic stress and academic procrastination in students of a University of Metropolitan Lima. In *Health Magazine*.
27. Rahimi, S., & Vallerand, R. (2021). The role of passion and emotions in academic procrastination during a pandemic (COVID-19). *Personality and Individual Differences*, 179(1), 367. <https://doi.org/https://doi.org/10.1016/j.paid.2021.110852>
28. Rodriguez, M. E., & Alfaro, R. M. (2022). Dependence on social networks and academic procrastination in university students of a university in Juliaca. *Scientific Journal of Health Sciences*, 15(1), 1–18. <https://doi.org/10.17162/rccs.v15i1.1751>
29. Saltürk, A. (2022). A Qualitative Study among Self-Identified Perfectionists and Procrastinators in Academic Tasks. *Participatory Educational Research*, 9(2), 1–24. <https://doi.org/10.17275/PER.22.26.9.2>
30. Silva-Arocha, A., Camellón-Curbelo, L. E., & Echemendía-González, N. (2020). Social networks: Essential tool in university communication. *Pedagogy and Society*, 23(58), 382–401. <http://revistas.uniss.edu.cu/index.php/pedagogia-y-sociedad/article/view/1069>
31. Solferino, N. (2012). Defining bad and good procrastination. *Working*, 10(5), 1–17. http://www.ecostat.unical.it/RePEc/WorkingPapers/WP05_2012.pdf
32. Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*, 31(4), 503–509. <https://doi.org/https://doi.org/10.1037/0022-0167.31.4.503>
33. Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65–94. <https://doi.org/10.1037/0033-2909.133.1.65>
34. Steel, P., & König, C. J. (2006). Integrating theories of motivation. *Academy of Management Review*, 31(4), 889–913. <https://doi.org/10.5465/AMR.2006.22527462>
35. Tezer, M., Ulgener, P., Minalay, H., Ture, A., Tugutlu, U., & Harper, M. (2020). Examining the relationship between academic procrastination behaviours and problematic Internet usage of high school students during the COVID-19 pandemic period. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 10(3), 142–156. <https://doi.org/10.18844/gjgc.v10i3.5549>
36. Tice, D., & Baumeister, R. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8(6), 454–458. <https://doi.org/10.1111/j.1467-9280.1997.tb00460.x>
37. Turel, Y., & Dokumaci, Ö. (2022). Use of media and technology, academic procrastination, and academic achievement in adolescence Özlem DOKUMACI. *Participatory Educational Research (PER)*, 9(2), 481–497. <https://doi.org/10.17275/per.22.50.9.2>
38. Xu, T.-Z. (2021). How do students view online learning: an empirical study of online learning during the Covid-19 Pandemic. *Revista Brasileira de Educação Do Campo*, 6(e11853), 1–20. <https://doi.org/10.20873/uft.rbec.e11853>
39. Yana, M., Sucari, W., Adco, H., Alanoca, R., & Yana, N. (2019). FOMO syndrome and degeneration of written language in elementary school students. *Journal of Communication and Development Research*, 10(2), 131–139.
40. Zambrano, J., Chumaña, J., Jácome, S., & Cuadros, A. (2022). Self-directed profile and procrastination in online education students. *Educate*, 58(2), 443–458. <https://doi.org/10.5565/rev/educar.1507>
41. Zarrin, S. A., Gracia, E., & Paixão, M. P. (2020). Prediction of academic procrastination by fear of failure and self-regulation. *Educational Sciences: Theory and Practice*, 20(3), 34–43. <https://doi.org/10.12738/jestp.2020.3.003>
42. Zhang, Y., Bai, X., & Yang, W. (2022). The chain mediating effect of negative perfectionism on procrastination: an ego depletion perspective. *International Environmental Research and Public Health*, 19, 1–13. <https://doi.org/10.3390/ijerph19159355>