

Academic Procrastination As A Challenge For Students' Mental Health In The Context Of Distance Learning And The Virtual World During The Covid-19 Pandemic

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Abstract

The research aims to study the dynamics of academic procrastination and its impact on the mental health of students during the transition to distance learning during the COVID-19 pandemic. At the beginning of the COVID-19 pandemic, it was identified a declining tendency of overall rates of academic procrastination and at the same time increase in the number of carriers of mid and high levels of academic procrastination. The decline in the general rates of academic procrastination at the beginning of 2021 testifies to the adaptation processes experienced by students to the conditions of distance learning. It was documented that students' academic procrastination is accompanied by a steady negative emotional tension. During the transition to distance learning, the intensity of students' learning activity has increased, which altogether causes stress as one of the main reasons for the academic procrastination among future psychologists. The study identified a risk of academic procrastination manifestation among students for their mental health, which provides a basis for developing and testing a program to prevent the phenomenon of academic procrastination among degree-seeking students.

Key words:

procrastination, academic procrastination, mental health, students, distance learning, social media, virtual identity.

1. Introduction

Information technology permeates every life aspect of a modern person. The advantages of this process are obvious, yet there are some risks and threats. "Not to become a victim (private or geopolitical), one needs to follow simple security rules and maintain the so-called cyber hygiene. Cyber hygiene includes a self-assessment of your risks: it is important to follow basic safety rules with your gadgets (private or corporate)" [1].

Not only are personal data at risk, but also the correlation of actual and virtual space. Virtual space has filled all the vectors of human nature. But if an adult can correlate the values of the real and virtual worlds, young people are at social risk due to their youth and lack of life experience. So, even at the level of a seemingly innocent and essentially harmless nickname, young people can lose the main thing and get carried away with secondary things. As scholars notice, "the phenomenon of nicknames is studied as a semantic source, which potentially generates a number of threats and troubles – the crisis of traditional anthroponymic culture, identity crisis, hidden sociality, and indefinite institutionalization, incognito style, a range of manifestations of loneliness – from voluntary solitude to traumatic isolation and forced detachment" [2].

Under difficult circumstances of the COVID-19 pandemic spread, people become very perceptive to the

effects of stress, increased physical and psychological pressure. The risk group consists of students who, under conditions of constant psychological stress, an excessive number of academic assignments, and limited time to complete them, tend to postpone some things, which eventually leads to situations when they have to complete them at the last moment in a severe shortage of time. This affects not only the quality of education but also the psychological and physiological state of students. Significant negative emotional sufferings, which are burdened by the conditions of the pandemic, can lead to mental health disorders among students. This raises the issue of overcoming stress, reducing procrastination, and adapting to changing circumstances. This increase of psychological burden concerns students with special educational needs (students with disabilities), who, along with the weakened psychophysiological functioning, also experience stressful states provoked by the fear of getting sick with COVID-19.

Academic procrastination among students. Procrastination is understood as a person's practice or habit of completing less important tasks instead of urgent and important ones, or doing more enjoyable things instead of less enjoyable ones, as well as completing high-priority tasks at the last minute [3]. Other researchers [4] interpret procrastination as a common and destructive form of self-regulation, which is not fully understood. Moreover, procrastination is defined as a pathological problem of clinically significant lack of self-control [5; 6].

Studies show that from 15% to 20% of the population chronically procrastinates [7; 4]. These numbers are even more pronounced in the academic environment, as from 80% to 95% of students at the university report procrastination at least once, and 46% of students say that they often delay academic activities [7; 8].

Academic procrastination, which is typical for schoolchildren and students, is manifested in the postponement of academic assignments, preparation for tests, pass/fail exams, exams [9], as a voluntary delay of starting or completing important educational tasks [10].

Academic procrastination and its impact on mental health. Academic procrastination is often understood as a problematic practice of emotional regulation associated with poor mental health. Higher levels of procrastination are associated by many researchers with increased levels of psychological stress. In addition, procrastination affects the level of anxiety, depression, decreased satisfaction with various spheres of life. In general, low levels of psychological well-being and academic procrastination are interrelated: students who procrastinate frequently have low levels of psychological well-being [11; 12]. Moreover, procrastination is associated with poor academic performance and a wide range of acute health problems caused by stress, such as headaches, digestive problems, colds and flu, insomnia [13; 14].

In the transition to distance learning, the intensity of students' learning activities has increased, and their intellectual and volitional pressure has increased as well. At the same time, the two-year prolongation of distance learning due to a long pandemic inevitably caused adaptive processes among students. The level of their academic procrastination is a local indicator of the success of students' adaptation to the conditions of distance learning. Its weakening indicates a successful adaptation, while the growth indicates certain destructive or crisis trends. As far as the authors know, research aimed at studying the dynamics of academic procrastination in distance learning circumstances has not been conducted. This problem is especially relevant in connection with the impact of academic procrastination on the mental health of students.

2. Materials and Methods

352 Ukrainian students majoring in Psychology (Borys Grinchenko Kyiv University) participated in the research, with 19 male and 333 female students. Respondents' age ranged from 17 to 25 years (with an average age of 21 years old). The first diagnostic session (which took place in spring 2020) was attended by 120 students. And 109 students attended the second session (in spring 2021). The results of both sessions were compared with the diagnostic data received from 123 respondents in 2019.

Such methods were used in the study: "General Procrastination Scale (GPS)" (K. Lay, 1986, adaptation by Varvicheva, 2010) and a questionnaire created by the authors formed in a Google form with ready answers to choose from and options for students to leave their own answers. The survey had two stages. At the first stage, the questionnaire contained 8 questions aimed for respondents to analyze changes in procrastination during the transition to distance learning, awareness of emotional accompaniment of procrastination, its forms, causes, and consequences. The purpose of the second stage of the survey, which included 6 semi-open questions, was to study the features of students' use of social media, including intensity, functionality, and security. These diagnostic tools proved to be useful because the testing provided objective indicators of the dynamics of the level of academic procrastination among students during the pandemic, and the survey revealed the subjective characteristics of academic procrastination and the specifics of respondents' activity in social media. Relevant diagnostic materials were offered to students online. Respondents were informed about the purpose of the survey, the anonymity of their answers and voluntarily agreed to participate in it. Mathematical processing of test data and the survey are implemented using the software package SPSS (version 26.0) by calculating the average values of diagnostic data.

3. Results

A favorable tendency on the level of procrastination decrease was identified based on the comparison of the results of studying levels of academic procrastination among students during years 2019–2021 (Figure 1).

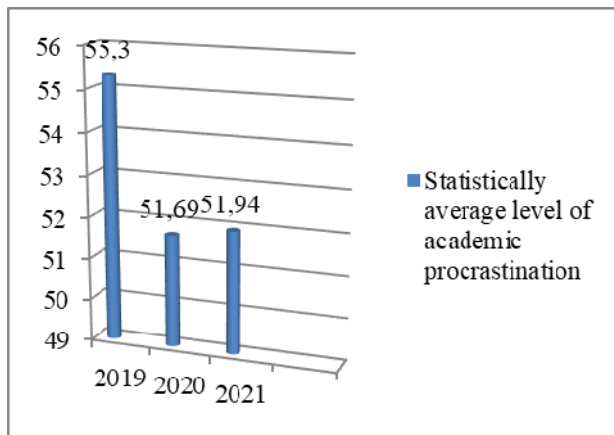


Fig. 1. The dynamics of statistically average rates of the academic procrastination among students

As the diagram data show an average level of academic procrastination among students in the beginning of 2020 quarantine compared to the previous year decreased, and in 2021 it rose insignificantly. However, to make a detailed breakdown of the data, it is necessary to take into account a distribution of carriers of low, average and high levels of academic procrastination among the interviewed future psychologists.

Throughout the year of 2019, students with an average level of academic procrastination significantly prevailed (64%) among other interviewed peers. The minority (13%) of the respondents constituted a sample of the respondents with a high level of academic procrastination (Table 1). At the beginning of the pandemic in 2020, there was an increase in the tendency of students to consciously delay completing their academic assignments, as the sample of a medium-level academic procrastination increased by 7% and the number of high-level carriers increased by 6%. In 2021 based on the increase by 14% of a sample of carriers of a low-level academic procrastination, a decrease of the number of students with medium and high levels of such procrastination (by 11% and 3%, respectively) was seen.

Table 1: Summary data on diagnostics of a level of academic procrastination among students

Number of carriers of AP* (%)	Years of studying		
	2019	2020	2021
Low-level AP	23	10	24
Medium-level AP	64	71	60
High-level AP	13	19	16

The lowest rate of AP	26	27	24
The highest rate of AP	88	90	83

* AP – academic procrastination

The questionnaire contained a question aimed at making future psychologists aware of changes in the level of their academic procrastination during distance learning. About a quarter of the surveyed students did not notice such changes. The majority of respondents surveyed in 2020 and almost half of the students who took part in the diagnosis in 2021, noted that their procrastination has intensified (Figure 2).

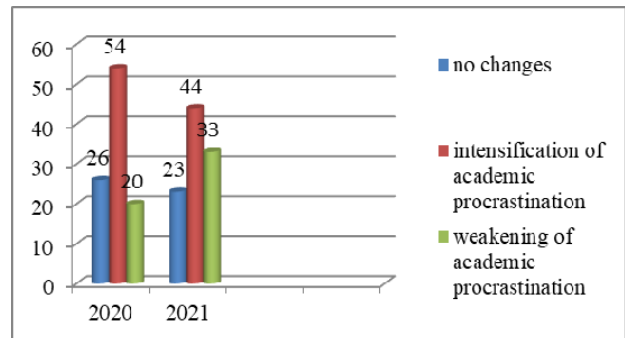


Fig. 2. Students' awareness of the changes in the level of academic procrastination during quarantine (results presented in % of the carriers)

Although, compared to 2020, the number of students who pointed to an intensification of procrastination decreased by 10% in 2021. On the other hand, the sample of students who pointed to the opposite trend – the weakening of the manifestations of academic procrastination, in 2021 increased up to 33%. These data confirm the process of mental adaptation of students to distance learning, which intensified in 2021, according to the criterion of decreasing the level of academic procrastination of future psychologists.

It was noted that negative emotions followed by academic procrastination intensified among future psychologists. It is established that in 2021 many more respondents experience anxiety and fear (23% and 10.5%, respectively) caused by their own academic procrastination than in 2020 (Table 2).

Table 2: Students' awareness of emotional sufferings of their own procrastination

Emotional sufferings	Chosen by students* (%)	
	Year 2020	Year 2021
Indifference	30	19
Anxiety	55	81
Shame, guilt	47,5	48
Rage, anger	15	12,5
Fear	12,5	23

* the question provided an option to choose several answers

If in 2020 almost a third of respondents were indifferent to the manifestations of their own academic procrastination, in 2021 their number decreased to 19%. In 2021, the number of students experiencing anger and rage provoked by their own academic procrastination slightly decreased compared to last year. The emotions of shame and guilt distinctive to this phenomenon cover almost half of all the respondents.

The study also clarified typical forms of procrastination of the respondents. The analysis of the results did not reveal significant differences between the respondents in 2020 and 2021. It is established that the most common forms of student procrastination are: (i) communicating on a cell phone or social media, (ii) watching movies, browsing television or the Internet, and (iii) hobbies. It is also noted that far less often students resort to such alternatives to educational activities as self-education, home chores, physical education, yoga, dancing.

With the help of the questionnaire, it was also achieved to determine students' vision of academic procrastination. Such determining factors as laziness and lack of volitional regulation were relevant among the respondents of years 2020 and 2021 (Table 3).

Table 3: Students' awareness of the factors of their own academic procrastination

Factors	Chosen by students* (%)	
	Year 2020	Year 2021
Laziness, lack of volitional regulation	53	58
Stress due to quarantine living and distance learning	66	25
Protest reaction to academic workload	41	15
Lack of interest in chosen major	9	0
Rejection of distance form of learning	38	6
Intensity of virtual presence in social media	22	50
Inconsistency of forms of learning process with interests and abilities	6	4
Professors being excessively demanding	16	18

* the question provided an option to choose several answers

The students who were interviewed in 2021 most often pointed to laziness and lack of will power as leading factors of their academic procrastination. We note here that awareness of an impact of these factors caused negative emotional sufferings like anxiety, shame, and guilt among future psychologists. At the same time, the conformity of forms of education to the interests and abilities was either sufficient for the interviewed students, or did not affect, in their view, the experience of academic procrastination. Respondents from both diagnostic sessions also did not pay much attention to the excessive demands of professors.

When comparing the results of the two diagnostic sessions, certain significant differences were found in the assessment of students' factors of their own academic procrastination. The answers of the students surveyed in 2020 clearly demonstrate their negative mental reaction to the implementation of quarantine and the transition to distance learning. It is stress due to quarantine living and distance learning conditions that was most often chosen as the cause of procrastination by future psychologists interviewed in 2020 (66% of elections). These respondents also recorded high rates of protest response to the academic workload (41%) and rejection of distance form of learning (38%).

There is a noticeable tendency to internalize the determinants of self-procrastination by students interviewed in 2021. Internal factors such as laziness and lack of willpower (58%), crisis experiences (50%) and stress due to quarantine (25%) were predominant in their point of view. It is also noteworthy that no respondent in 2021 sees the cause of their own procrastination as insufficient interest in the chosen occupation, which confirms our previous assumption of a stable professionally oriented motivation of applicants.

The questionnaire was used to learn the respondents' vision of the consequences of their own academic procrastination for personal and professional development. The recognition of such a consequence as deterioration of emotional state, anxiety, remorse is common in 85% of students of both diagnostic sessions. This fact clearly pinpoints the impact of academic procrastination on students' mental health. Almost the same number of future psychologists surveyed in 2020 and 2021 (22.5% and 23%, respectively) acknowledge the weakening of interest in learning as a consequence of academic procrastination. Such a consequence as a decrease in academic performance, in respondents' point of view in 2020, revealed about 22.5% of students. In 2021, 48% of respondents mentioned a decline in academic performance due to procrastination.

Our research included students with disabilities (11 people). Given that the pandemic has created a real threat to the maintenance of people with disabilities and provoked an increase in their anxiety, it was important to find out whether the interviewed future psychologists were aware of the risks of distance learning for students with disabilities. When asked how distance learning affected students with special educational needs, the students from both diagnostic sessions responded similarly (Table 4).

Table 4: The influence of distance learning on the psychological well-being of students with disabilities as seen by the future psychologists

Influence quality	Students' choice (%)	
	2020	2021
Negative influence	56	52

Positive influence	12	10
Individual influence quality	26	34
Undecided	6	4

As we can see, most respondents realized the risks of distance learning for students with disabilities due to the deterioration of their psychological well-being and advanced social isolation. Some respondents indicated that the transition to distance learning has a positive effect for students with disabilities due to a reduced risk of developing COVID-19 when leaving home is restricted. At the same time, more than a third of respondents surveyed in 2021 indicated the individual influence quality, obviously having experience of direct communication with students with disabilities.

It was also important to find out whether the University’s educational environment has created favorable conditions for distance learning for students with special educational needs. This problem has become relevant in terms of the significance of supporting inclusive education and opportunities for free access to educational services for students with disabilities. The survey of respondents in two sessions showed a positive pattern – almost 97% of respondents noted that the University has created favorable conditions for students with disabilities to get an education (both in the format of offline and online training).

The study also found out the forms of procrastination characteristic of respondents. The outcome analysis did not reveal significant differences between the respondents in 2020 and 2021. It is found that the most common forms of student procrastination are:

- 1) communication in social media,
- 2) watching movies, searching for information on TV or the Internet, and
- 3) hobbies.

It is also recorded that students are considerably less likely to resort to such alternatives to educational activities as self-education, household work, physical education, yoga, dancing.

Since it is established that social media are a popular communication platform for students, it was important to find out how safe and useful for them the content of this communication is. Therefore, at the next stage of the study, the second block of the questionnaire was developed and applied. First, it was found out what functions the social media performed for the surveyed students. In general, the responses to the questionnaire in 2020 and 2021 coincide. The most popular functions are maintenance and expansion of the social circle, access to the necessary (popular) information, and interaction in social media as a way to relax and distract from learning (Table 5), that is, communication, information, and relaxation functions dominate. At the same time, students did not fully use the opportunities of social media for professional training. But

it was found that communication in social media appears in a significant percentage of respondents as a chronophage, and in 2021 this trend has increased.

Table 5: Social media functions for students

Functions	Students’ choice* (%)	
	2020	2021
Space for maintaining and expanding communication	55	77
Method for getting popular information	55	61
Source of knowledge for professional training	10	12
A tool for self-presentation and self-expression	13	11
A time-wasting tool	32	40
A way to relax, distract from studies	49	56

* the question provided for simultaneous choice of multiple response options

This is confirmed by the answers to the next questionnaire question on the length of time students spend on social media. Assuming that almost the entire sample of respondents (98%) visit social media daily, their average time spent has changed relative to the respondents in 2020 and 2021 (Figure 3).

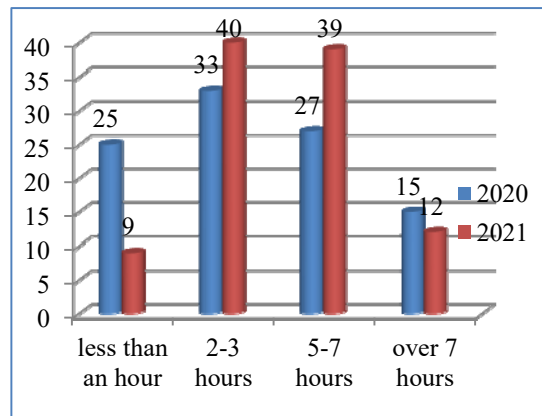


Fig. 3. Students' daily time on social media (results presented in % of the carriers)

The data obtained show a slight decrease (by 3%) in the number of students who spend almost a third of their days on social media, as well as a 14% decrease in the number of people who spend less than an hour there. However, an increase in the number of respondents who spend 2-4 hours (by 7%) and 5-7 hours (by 12%) on social media was found. This clearly indicates the significant amount of time that a virtual presence on social media takes up for students.

Within this background, the problem of forming a young person’s psychological dependence on his

immersion in the virtual world becomes urgent. A related question in the questionnaire is that of the respondents' perception of their addiction to social media. When analyzing the responses in 2021, it was found that 22% of respondents considered such manifestations sufficient, 28% rated them as partial, 45% of students insisted on no signs of addiction, and another 5% found it difficult to decide. The sample of respondents in 2021 showed a slightly different distribution: 24% of students considered the manifestations of addiction to social media sufficient, 27% – episodic, 46% of respondents did not see any signs of this addiction, and 3% could not decide on this issue. In general, almost half of the respondents of both years have sufficient and partial signs of addiction, which requires psychological correction of values and ways to implement the life strategy of these students.

The survey also clarified the respondents' opinion on whether social media pose a certain danger to them and society. Analysis of the responses showed a tendency to preserve the average data for both years. 32% of respondents of both years are critical of social media as a source of individual and social danger. 30% of students surveyed in 2020 and 31% of students surveyed in 2021 see a partial threat from social networks. It should be noted that more than a third of respondents do not recognize the threat of social media. They are considered safe by 38% of respondents in 2020 and 37% of respondents in 2021. The fact indicates a high probability of adverse impact of social media on these students and the need to correct their intellectual principles.

Later, when implementing the study, it was found out the threats of communication in social media students personally had to face. The following options were formulated to this question:

- fake (false, hoax) information;
- trolling – provocation, ridicule, insult in network communication;
- call for extreme selfies – a photo of yourself in life-threatening conditions;
- a challenge to participate in dangerous games or activities;
- hacking – computer hacking of personal data;
- cyberbullying – virtual humiliation, harassment, and terror.

Processing of the questionnaire results showed that all respondents of both years dealt with fake information (Table 6). In the comments, students noted that often this false or dubious information related to the spread of the COVID-19 virus, signs of illness, pandemic, quarantine restrictions, etc. In the 2021 questionnaire, fakes about vaccination were added. A lot of respondents in 2020 reported trolling in relation to them (85%), a trend that affected respondents in 2021 yet slightly less (82%). Even greater manifestations of virtual harassment, namely

cyberbullying, were felt by 13% of students surveyed in 2020 and 9% of respondents in 2021.

Table 6: Experience receiving threats from being in social media

Threats	Students' choice* (%)	
	2020	2021
Fake information	100	100
Trolling	85	82
Call for extreme selfies	25	27
A challenge to participate in dangerous games or activities	10	36
Hacking	7	11
Cyberbullying	13	9

* the question provided for simultaneous choice of multiple response options

However, in 2021, the number of respondents called up for extreme selfies via social media increased by 2%. Also in the same year, there was an increase in challenges to participate in dangerous games or actions, which were encountered by more than a third of respondents in 2021. A 4% increase in respondents, compared to respondents in 2020, had to deal with hacking. In general, the global trend of spreading threats to the virtual world fully applies to Ukrainian students as active users of social media.

A popular way to present yourself and maintain digital communication is to create a virtual identity. The dynamism and multi-vector nature of social media attract modern young people. You can create a virtual identity with significant modifications, and often change its manifestations based on the reaction of subscribers. Immersion in the virtual world can provoke a gap between real qualities, manifestations, and fictional characteristics, which, in turn, suppresses the authenticity and identity of the individual, reduces his real space of communication and self-realization. Therefore, in the course of our research, the respondents were asked to define to what extent their nickname and characteristics of a virtual identity created in social media correspond to their genuine formal (age, status, gender) and psychological (experience, interests, character traits) characteristics. Generalized quantitative results of the responses for both years are shown in Figure 4.

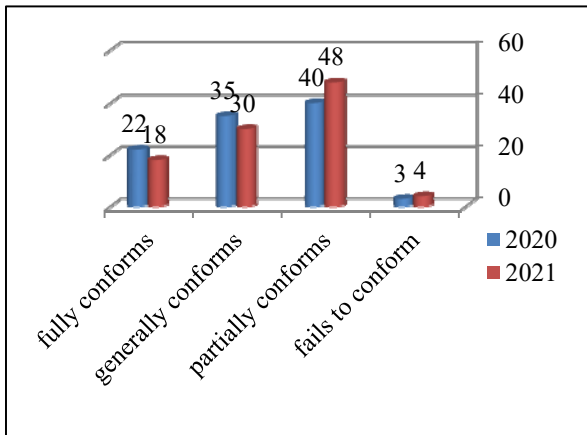


Fig. 4. The characteristics conformity of students' real and virtual identities (results presented in % of the carriers)

A comparison of data from both years of the study revealed a growing trend of differences in the characteristics of real and virtual identities among students surveyed in 2021. This tendency became more intense as a result of quarantine restrictions and an increase in the time spent by young people on social media. Almost half of the respondents surveyed in 2021 differ significantly in these characteristics, and 4% generally have a virtual image that does not conform to real personal characteristics, which is a significant threat to the immature identity of young people. "...The digital information environment and virtual communities where communication is formed with technical means may substitute the reality in the future. It will blur the understanding of the factor of relativity." [15].

4. Discussion

As a result of the study, there was a tendency to increase the number of carriers of medium and high levels of academic procrastination of students during the COVID-19 pandemic. These data are consistent with studies that have found that long-term physical distancing, reduced social communication and changes in learning formats caused by the 2019 corona virus pandemic (COVID-19) have reduced student activity and increased procrastination [16].

It was found that students were experiencing severe stress at the beginning of the transition to distance learning, which correlates with the results of research that also shows an increase in the level of psychological stress during pandemic [17].

Students' communication over cell phones or on social media was identified as the leading form of procrastination. These data correlate with the results of studies conducted by Turkish scientists, who also recorded a direct correlation between the problematic use of the

Internet by students and the strengthening of academic procrastination [18].

There is a steady negative emotional tension among students, which accompanies their academic procrastination. Most of the students surveyed insisted on experiencing emotions such as anxiety, shame, guilt, and fear. Such data correlate with the results of studying the problems of procrastination, anxiety and depression by Ukrainian medical students in forced social distancing due to the COVID-19 pandemic. The study confirmed that the COVID-19 pandemic, as a stressful moment of external testing of identity, caused the emerging of protective mechanisms among medical students in the form of emotional and behavioral changes and disorders, as well as adaptation problems [19]. Studies by Greek researchers have shown that students who tended to procrastinate in general, or in an academic sense in particular, reported decreased psychological well-being and life satisfaction, decreased emotional connections, loss of behavioral and emotional control, and increased anxiety, stress, and depression symptoms [20].

Laziness, problems with volitional regulation, stress and crisis experiences, and protest to academic workload were identified as leading factors of academic procrastination among students. This partly coincides with the results of a study which found that the main causes of student procrastination are rebellion, fear of being evaluated and laziness [9].

It was found that the dominant consequences of academic procrastination of students are the deterioration of their emotional state, anxiety, remorse, as well as a decrease in academic performance. These data are quite consistent with the findings of Brazilian researchers. They emphasize that academic procrastination can lead to negative consequences for students' mental health, such as suffering and discomfort over time while tasks remain unfulfilled, feelings of incompetence, anxiety and guilt. These negative thoughts and emotions affect the productivity level of educational activities [8].

Thus, the manifestations of academic procrastination are a serious challenge to the mental health of students. First, the stress caused by the pandemic, quarantine, and the transition to distance learning as a burden on the student's mental health provokes the manifestations of academic procrastination as a protective reaction to the complication of life circumstances. Secondly, the negative emotions of anxiety, fear, and guilt that accompany a student's awareness of his or her own procrastination further weaken his or her mental health.

Of course, our research focuses more on the second aspect, which is the impact of academic procrastination on students' mental health. It is also limited by the dominance of the subjective method of diagnosis – questionnaires, and the composition of the sample, which covers only future psychologists. Students who master the

psychological profession show a greater tendency to understand and analyze their own mental manifestations. Undoubtedly, this impacted the results of the study. In this regard, it is appropriate to conduct future research with students of other majors.

We also overlooked gender differences in the study of the relationship between academic procrastination and student mental health, which may be a promising prospect for a further study. Exploration of alternative learning areas of procrastination of students can deepen and expand the results of our study. This will make it possible to determine whether procrastination is a general personal manifestation among students or whether it is limited by local difficulties in their professional development.

However, our study revealed the risk of academic procrastination among students for their mental health, which provides grounds for developing and testing a program to prevent the phenomenon of academic procrastination among students by means of optimizing educational and scientific cooperation with professors, improving time management skills, self-understanding, and self-development.

4. Conclusions

The results of the study of the dynamics of academic procrastination of future psychologists during 2019-2021 indicate qualitative changes in the level and manifestations of academic procrastination among students due to the transition to distance learning. At the beginning of the COVID-19 pandemic, there was a decreasing tendency in overall rates of academic procrastination among students and, at the same time, increase in the number of medium and high-level carriers. The decrease in the general statistical indicators of academic procrastination recorded in 2021 is a manifestation of the adaptive processes that took place among students to the conditions of distance learning. However, the persistence of negative emotional sufferings and self-regulatory problems that accompany students' academic procrastination in 2021 poses a risk to their mental health. A common form of student procrastination is communication in social media. The results of the survey of students clearly showed an increasing tendency of their activity in social media with a simultaneous growth in risks to personal functioning and life self-realization.

References

- [1] Khrypko, S., Aleksandrova, O., Stoliarchuk, L., Ishchuk, O., Oblova, L., Pavlovska, O., Bezuhlyi, A. Value Complexity of Virtual Communities and Information Security in the Postmodern World: Semantic Focus and Language Innovations. *International Journal of Computer Science and Network Security*, 21(12), 712–718. <https://doi.org/10.22937/IJCSNS.2021.21.12.97>
- [2] Matveev, V., Nykytchenko, O., Stefanova, N., Khrypko, S., Ishchuk, A., Pasko, K. Cybercrime as a Discourse of Interpretations: the Semantics of Speech Silence vs Psychological Motivation for Actual Trouble. *International Journal of Computer Science and Network Security*, 21(8), 203–211. <https://doi.org/10.22937/IJCSNS.2021.21.8.27>
- [3] Salem Press Encyclopedia of Health, January, 2016.
- [4] Steel P. Nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*. 2007;133(1):65-94.
- [5] Hocker, Engberding, Haferkampat al. Wirksamkeit von Arbeitszeitrestriktion in der Procrastinationsbehandlung (Effectiveness of working time restriction in the treatment of procrastination). *Verhaltenstherapie*. 2012;22(1):9-16.
- [6] Smoletz, F. Academic Procrastination and its effects on Perceived Stress and Mental Well-Being. – Department of Psychology, Health and Technology Faculty of Behavioural Management and Social Sciences. The Netherlands: University of Twente; 2019, p. 1-5.
- [7] Harriott, J., Ferrari, J. Prevalence of procrastination among samples of adults. *Psychological Reports*. 1996;78,611–616. <https://doi.org/10.2466/pr0.1996.78.2.611>
- [8] Evandro Morais Peixoto, Ana Celi Pallini, Robert J. Vallerand et al. The role of passion for studies on academic procrastination and mental health during the COVID 19 pandemic. *Social Psychology of Education*. 2021. <https://doi.org/10.1007/s11218-021-09636-9>
- [9] Angélica Garzón Umerenkova, Javier Gil Flores, Jesús de la Fuente Arias. Demographic, academic and personal traits associated with three types of procrastination in university students: *Bordon-Revista de Pedagogía*. 2020;72(1):49-65.
- [10] Schouwenburg, H. C. Academic procrastination: Theoretical notions, measurement, and research. *Counseling the procrastinator in academic settings*. Washington, DC: American Psychological Association. 2004;3-17.
- [11] Stead, R., Shanahan, M. J., Neufeld, R. W. “I’ll go to therapy, eventually”: Procrastination, stress and mental health. *Personality and Individual Differences*. 2010;49(3):175-180.
- [12] Mortazavi, F. The prevalence of academic procrastination and its association with medical students’ well-being status. *International Journal of Humanities and Cultural Studies (IJHCS)*. 2016;3(2):1256-1269.
- [13] Sirois, F., Melia-Gordon, M., Pychyl, T. “I’ll look after my health, later:” an investigation of procrastination and health. *Pers. Individ. Dif.* 2003;35:1167-1184.
- [14] Sirois, F. “I’ll look after my health, later:” a replication and extension of the procrastination health model with community dwelling adults. *Pers. Individ. Dif.* 2007; 43:15-26.
- [15] Matveev, V., Khrypko, S., Tytarenko V., Stoliarchuk, O., Ishchuk A., Tereshchenko, M., Pasko, K. Value Semantics of Multivector Behavior of Virtual Communities as a Psycho-Potential Hazard to Spiritual Foundations, Information Culture, and National Security. *International Journal of Computer Science and Network Security*, 22(1), 625-633. <https://doi.org/10.22937/IJCSNS.2022.22.1.82>
- [16] Jia J., Jiang Q., Lin X. H. Academic anxiety and self-handicapping among medical students during the COVID-

19 pandemic: A moderated mediation model. (Research square). 2020; 1–22. <https://doi.org/10.21203/rs.3.rs-77015/v1>

- [17] Maia, B. R., Dias, P. C. Ansiedade, depressão e estresse em estudantes universitários: o impacto da COVID-19 [Anxiety, depression and stress in university students: The impact of COVID-19]. *Estudos de Psicologia*. 2020;37:e200067. <https://doi.org/10.1590/1982-0275202037e200067>
- [18] Tezer, M., Ulgener, P., Minalay, H. et al. 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*. 2020;10(3):142-156.
- [19] Romash I. The nature of the manifestation of procrastination, level of anxiety and depression in medical students in a period of altered psycho-emotional state during forced social distancing because of pandemic COVID-19 and its impact on academic performance. *Mental Health: Global Challenges Journal*. 2020. <https://doi.org/10.32437/mhgcj.v4i2.92>
- [20] Argiropoulou M, Vlachopanou P. The role of psychological distress as a potential route through which procrastination may confer risk for reduced life satisfaction. *Current Psychology*. 2020. <https://doi.org/10.1007/s12144-020-00739-8>

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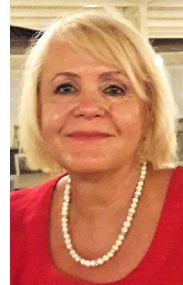


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