

The Relationship between Academic Procrastination and Stress in Times of Uncertainty

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Abstract: *At present, the COVID-19 epidemic has had a huge impact on the study and life of college students in my country. In the face of a major epidemic, college students should pay attention to both physical health and emotional and mental health. This study conducted a questionnaire survey on college students across the country. After comparing with the survey results of the previous literature, the study found that college students' delayed behavior and psychological state of challenging stress and frustrating stress are affected by the COVID-19 epidemic to varying degrees, indicating that college students may study online at home. The source of the impact. The results show that the lack of effective supervision and learning atmosphere of college students studying at home will obviously reduce the learning efficiency and increase the procrastination behavior.*

Keywords: *Academic Procrastination, Challenge Stress, Hindrance Stress*

1. Introduction

Since January 2020, the new coronavirus pneumonia epidemic has attracted wide attention from the international community. The World Health Organization (WHO) has designated the disease caused by the new coronavirus (COVID-19) as a public health emergency of international concern. The suddenness and unpredictability of public health emergencies will lead to a sharp decline in people's sense of security, which can easily cause anxiety. At the same time, the special psychological characteristics of college students often cause panic and anxiety that are difficult to control themselves when facing public health emergencies. The purpose of this study is to understand the status of procrastination and stress among college students of different grades and genders during the epidemic, and to explore the factors that affect procrastination and stress, and provide a reference for the construction of psychological crisis intervention mechanisms in colleges and universities under the epidemic.

Procrastination is to avoid performing tasks that need to be completed within a certain period (Karen K. Kirst-Ashman, 2016). Because of its hindrance to human productivity, it is usually considered as a negative feature, usually related to depression, inferiority, guilt and inadequacy (Duru Erdinç, 2017). A 1992 study showed that 52% of the students surveyed said there was a moderate to high demand for procrastination assistance. It is estimated that 80–95% of college students engage in procrastination, and about 75% consider themselves to be procrastination patients (Gallagher, Robert P., 1992). In a study of college students, procrastination performed more on tasks that were considered unpleasant or imposed on others than tasks that thought students lacked the skills needed to complete the task (Norman A. Milgram, 1988). It is also found that the increase in academic delay increases the frequency of different forms of academic misconduct, that is, the use of fraudulent excuses, academic plagiarism, the use of prohibited means in the exam, carrying prohibited items to the exam, fabricated or forged data and various academic misconduct (Justine Patrzek, 2014).

Previous research tried to explore the reasons that causes the academic procrastination. Personal reasons that cause students to procrastinate include fear of failure and success, expectations of perfectionists, and legitimate activities that may have priority over academics, such as work (The Writing Center at UNC-Chapel Hill, 2012). The environmental reason is also critical for procrastination. The environment that there are distracting things around the students, which prevents them from concentrating on their studies. Under special circumstances such as COVID-19, students cannot normally complete their studies at school and can only rely on the Internet. According to an Educational Science Professor, many college students lack effective time management skills when using the Internet (Odaci Haticce, 2011). When students use online learning, they are easily tempted by entertainment such as social networks, online videos, and video games, resulting in academic procrastination.

Procrastination is an act, not a mental illness. In clinical research, there is no procrastination in the diagnosis manual. In fact, procrastination is an avoidance behavior that people show when they are driven by anxiety or stress. Dr. Timothy Pynchyl, author of "Solving the Procrastination Puzzle: A Concise Guide to Strategies for Change," pointed out that procrastination is an act of "succumbing to feeling good about yourself". In the face of the pressure from the task, in order to feel good for a short time, emotions will drive us to do some behaviors that are away from the present and avoid the task. Nonetheless, because procrastination will result in a series of undesirable consequences, procrastination may still increase the level of stress in the long run, and the relationship between procrastination and the level of stress is still a problem worthy of study.

In addition to individual characteristics, procrastination and stress are affected by the environment. The outbreak of COVID-19 this year happened to be a very special environment. Due to the epidemic situation, college students are required to isolate themselves at home and can only learn through Internet teaching, which is separate from the original learning environment, without the supervision of teachers and the learning atmosphere surrounded by classmates. The psychological status of college students is also affected by the changes in the epidemic situation at a time of uncertainty. In this situation, how the students' procrastination behavior and stress level will change, and what is the relationship between procrastination behavior and stress? This is the focus of this research.

Under the current COVID-19 epidemic, the psychological state of college students has been affected to a certain extent. The long-distance teaching method makes procrastination a common phenomenon and a major factor affecting academic performance.

If procrastination and stress are positively correlated, then the more serious the procrastination, the higher the level of stress. The items tested and analyzed data on procrastination and stress levels between different grades and genders.

2. Research Methods

Sample and procedure Our sample consists of University students in China. In 2020, 169 students were voluntarily filled out the surveys online. In total, 169 participants completed all questionnaires (49.7% of men; 50.3% of women). All participants were undergraduate students with an average university attendance of four years. The distribution of the participants' grade is as follows: freshman (21.3%), sophomore (24.3%), junior (34.9%), and senior (19.5%).

3. Questionnaire analysis was used

We used Pang Weiguo and Han Guining (2009) to make reference to the "Questionnaire for Undergraduate Learning Delays" compiled by relevant foreign questionnaires. The aim was to investigate the extent of delays in the completion of homework, review preparation, and autonomous learning and the impact of delays. The questionnaire consists of 37 questions, of which there are 9 questions in the completed homework dimension, 10 questions in the review preparation, 7 questions in autonomous learning, and 1 question in the willingness to change. Using Likert's 5-point scoring, from "never like this" to "always like this" 1-5 points, the higher the score, the higher the degree of study delay.

We used the Challenge and Hindrance Stress: Relationships With Exhaustion, Motivation to Learn, and Learning Performance questionnaire written by Jeffrey A LePine, Marcie A LePine, and Christine L Jackson. The study showed that hindrance stress was negatively related to motivation to learn, challenge stress was positively related to motivation to learn, and motivation to learn was positively related to learning performance.

Analysis. A two-tailed partial correlation analysis was conducted to determine the relationship between procrastination and stress after controlling for gender and grade.

4. Investigation results

The average scores of the whole sample are 3.81 ± 0.95 for the procrastination, 3.82 ± 1.06 for the hinderance stress and 3.83 ± 1.08 for the challenge stress. Figure 1 and 2 display the procrastination and stress.

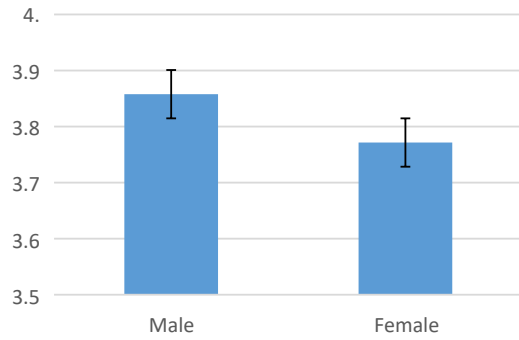


Figure 1a Procrastination Scores for Different Gender

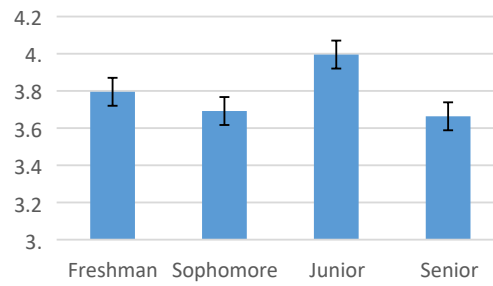


Figure 1b Procrastination Scores for Different Grades

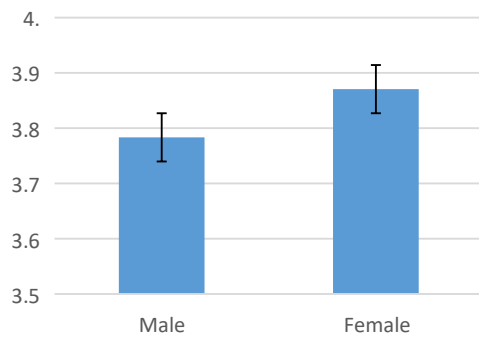


Figure 2a Challenge Stress Scores of Different Genders

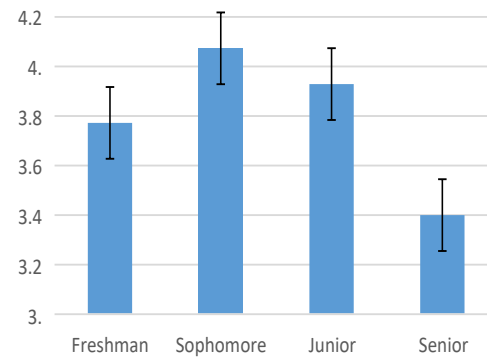


Figure 2b Challenge Stress Scores of Different Grades

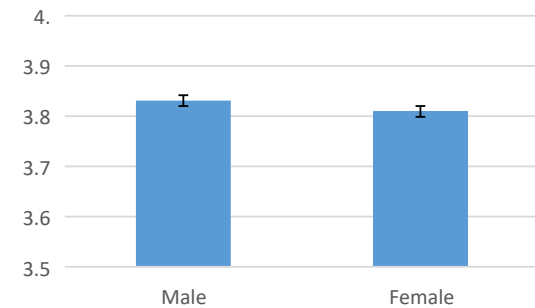


Figure 2c Hindrance Stress Scores of Different Genders

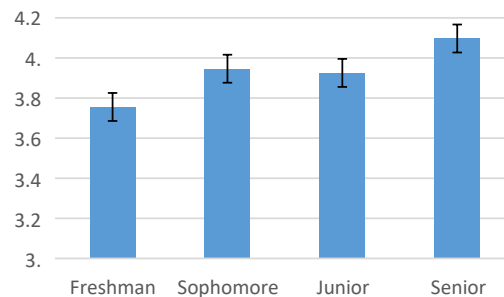


Figure 2d Hindrance Stress Scores of Different Grades

A two-tailed partial correlation analysis was conducted to determine the relationship between the students's delayed behavior and stress after controlling for gender and grade. The results showed a significant positive correlation between procrastination and hinderance stress ($r=0.193^*$, $p=0.012$), so does the procrastination and challenge stress ($r=0.192^*$, $p=0.013$).

Table 1. The correlation analysis between Procrastination and Hinderance/Challenge Stress

	M	SD	Procrastination	Hinderance Stress	Challenge Stress
Procrastination	3.814	0.9531			
Hinderance Stress	3.82	1.0551	0.193*		
Challenge Stress	3.827	1.0797	0.192*	0.911***	

* $p<0.05$ -2 tailed

** $p<0.01$ -2 tailed

*** $p<0.001$ -2 tailed

Table 1 presents a bar graph of procrastination scores, depression stress scores and challenge stress scores for different genders and grades.

Partial correlation analysis is to analyze the linear correlation between the two variables under the condition of controlling the linear influence of other variables. As shown in the table, the correlation between the variables is calculated by eliminating other relevant factors of gender and grade above.

5. Discussion

The purpose of this study is to explore the changes in the psychological status of college students after the change of teaching methods during the COVID-19 epidemic and the impact of such changes on their academic performance. The results of the study show that the overall procrastination behavior of students has increased, but students of different grades and genders have been affected to varying degrees. The increase in procrastination is inversely related to academic performance.

It can be concluded from Figure 1a that there is a significant difference in the overall academic delay of college students. The degree of academic delay of male academics is significantly higher than that of female students.

It can be seen from Figure 1b that there are significant differences in the degree of delay among college students of different grades. Junior students have the highest average delay scores, followed by freshmen. Sophomore and senior students have relatively low procrastination scores.

The above conclusions are not completely the same as the conclusions in the previous literature that the same scale was used to test college students. The previous literature survey results show that sophomore, junior, and senior students all have more academic delays.

From Figure 2a and 2c, both male and female students show significant differences in the dimensions of challenge stress and frustration stress. The depression stress score of male students is significantly higher than that of female students, while the challenge stress score of female students is significantly higher than that of male students.

According to Figure 2b and 2d, students of different grades show different differences in the scores of challenge stress and hinderance stress. Freshman students' challenge stress scores are significantly lower than freshman, sophomore, and junior students, while freshman students' scores for hinderance stress are lower. Sophomore and junior students have similar scores in both stress test. Seniors have lower challenge stress scores, but hinderance stress scores are higher.

Due to the COVID-19 epidemic, college students can only study at home, lacking a standard "learning space". The family is a place of leisure and relaxation, and it is easy to give people a mental hint of slackness that is not conducive to efficient study and work. In addition, there is no order and framework in the learning environment at home, relatively free in time, and it is not easy to concentrate. It is easy to continue to pay attention to the content of "anxiety" and "boring" instead of learning, and further lead to increased pressure. Excessive pressure may continue to cause delays and form a vicious circle.

6. Limitations of subject research and a future outlook

Due to the policy of restricting travel during the COVID-19 epidemic, the questionnaires used in this study were all distributed online and spread through social software. The data provided by participants may not be accurate enough.

The sample of college students can be increased and extended to other groups. Due to the limitation of time and energy, this study mainly focused on college students who forwarded questionnaires through social software. The representativeness of the sample is not comprehensive enough and has certain limitations. In the future, you can choose more participants to participate, or promote to other middle school population for research.

The academic delay of college students may be a serious group among students, but it is still necessary to further study other student groups, and even study the procrastination behavior of the working group.

We hope to further explore the influencing factors and mechanisms of academic delays in the future, so as to enrich our understanding of academic delays and take more comprehensive measures.

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