

EXPLORING REASONS OF ACADEMIC PROCRASTINATION AMONG NHA TRANG UNIVERSITY STUDENTS USING SPARK LEARNING MANAGEMENT SYSTEM: GENDER AND GRADE POINT AVERAGE DIFFERENCES

Nguyen Thi Nhat Thao*, Bui Thi Ngoc Oanh

Nha Trang University

ARTICLE INFO	ABSTRACT
Received: 17/7/2025	This study aims to investigate the reasons for academic procrastination among Nha Trang University students using the Spark learning management system for online homework, and examine whether these reasons vary by gender and grade point average. In total, 145 students participated in an online survey and a follow-up interview was conducted with 10 participants. The study used the Procrastination Scale for students to identify key reasons of academic procrastination including fear of failure, task resistance and other factors. Results show that male students reported higher levels of procrastination across most reasons while grade point average differences were mostly insignificant. Students with lower grade point averages were more likely to procrastinate due to lack of understanding. Qualitative data further revealed that poor time management, low motivation, and academic overload contributed to procrastination. Participants suggested structured deadlines, frequent reminders, and reward-based strategies as effective solutions. The study concludes that procrastination is a systemic issue in digital learning environments, requiring both lecturer support and student self-regulation.
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KHÁM PHÁ LÝ DO TRÌ HOÃN LÀM BÀI TẬP TRỰC TUYẾN CỦA SINH VIÊN TRƯỜNG ĐẠI HỌC NHA TRANG: KHÁC BIỆT GIỮA GIỚI TÍNH VÀ ĐIỂM SỐ

Nguyễn Thị Nhật Thảo*, Bùi Thị Ngọc Oanh

Trường Đại học Nha Trang

THÔNG TIN BÀI BÁO	TÓM TẮT
Ngày nhận bài: 17/7/2025	Nghiên cứu này nhằm tìm hiểu các nguyên nhân dẫn đến việc trì hoãn làm bài tập của sinh viên tại Trường Đại học Nha Trang khi sử dụng hệ thống quản lý học tập Spark để làm bài tập trực tuyến, đồng thời xem xét liệu có khác biệt theo giới tính và điểm trung bình học tập hay không. Có 145 sinh viên tham gia khảo sát trực tuyến và phỏng vấn sâu với 10 sinh viên. Nghiên cứu sử dụng thang đo Trì hoãn học tập dành cho sinh viên để xác định ba nhóm nguyên nhân chính dẫn đến trì hoãn học tập gồm nỗi sợ thất bại, sự chán ghét nhiệm vụ và những lý do khác. Kết quả cho thấy nam sinh có mức độ trì hoãn cao hơn ở hầu hết các lý do, trong khi sự khác biệt theo điểm trung bình học tập phần lớn không đáng kể. Tuy nhiên, sinh viên có điểm trung bình thấp có xu hướng trì hoãn do thiếu hiểu bài. Kết quả phỏng vấn sâu cũng cho thấy việc quản lý thời gian kém, thiếu động lực và quá tải học tập là những yếu tố góp phần dẫn đến trì hoãn. Các sinh viên đề xuất các giải pháp như: thiết lập thời hạn hoàn thành bài tập rõ ràng, nhắc nhở thường xuyên và áp dụng phần thưởng. Nghiên cứu kết luận rằng trì hoãn học tập là một vấn đề có tính hệ thống trong môi trường học trực tuyến, đòi hỏi sự hỗ trợ từ giảng viên kết hợp với khả năng tự điều chỉnh của người học.
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* Corresponding author. Email: thaontm@ntu.edu.vn

1. Introduction

In the era of digital learning, learning management systems (LMS) have become essential tools in higher education, offering flexibility and promoting independent learning. One such platform, Spark, has been adopted by Nha Trang University to facilitate homework completion in General English (GE) courses since 2024. It is a web-based learning management system provided by National Geographic and replaces the old MyELT LMS. This platform provides supplementary and self-assessment language exercises ranging from vocabulary to pronunciation for practices outside class hours. These exercises are assigned by GE instructors with specific submission deadlines. This means that students using Spark LMS are responsible for completing the tasks without direct supervision, which demonstrates self-regulated learning. Additionally, it does not feature an automated reminder system, which may contribute to learners' tendency to forget assigned tasks or deadlines. Apart from its assignment delivery function, Spark LMS is also utilized as an essential tool for course management, content delivery, and performance monitoring, making it indispensable in modern education. By effectively using these features, educational institutions can improve student engagement, cultivate independent learning habits, and boost student academic performance [1]. In addition to having the same courses as MyELT LMS, this platform provides teacher resources, the classroom presentation tool, assessment suite, and student's ebook. Students who join the courses on Spark LMS have the opportunity to practice four English skills, and measure their progress. To qualify for the final exam, non-English major students at Nha Trang University are required to complete a series of tasks and achieve at least 70% overall by the end of the course. While this structure aims to foster consistency and engagement, many students delay task completion until the deadline approaches. This behavior is widely recognized as academic procrastination which is described as "the tendency to postpone and delay academic tasks or ignoring academic responsibility during the entire course of studies" [2].

In Viet Nam, procrastination in academic settings has been found to be widespread among college students. The study by Nguyen et al. [3] indicates that over 50% of undergraduates at the University of Education – Hue University have a significant issue of study-related delay behavior. In another research by Nguyen et al. [4], 535 undergraduates were surveyed to scrutinize the present situation of procrastination in studying. The findings reveal that 95.52% of them had previously postponed their academic tasks. Additionally, Nguyen et al. [5] conducted a study to examine the relationship between the satisfaction of basic psychological needs, learning motivation, and academic procrastination among 341 undergraduates at Vietnam National University. The results show that students who have less motivation to learn and have the thought that university education is pointless or they are incapable of succeeding in university tend to exhibit greater levels of academic procrastination. However, there is still a paucity of studies examining the procrastination reasons of English language learners within LMS-based learning environments, especially in using Spark LMS.

According to Solomon et al. [6], academic procrastination is defined as a behavioral tendency in which students delay engaging in academic responsibilities such as studying, completing readings, or writing papers, even when they initially intend to complete those tasks. Most studies indicate that academic procrastination leads to negative impacts on students. For example, Steel [7] reports that procrastination normally causes negative effects on student's achievements and their quality of life. In addition, academic procrastination has been found to elicit self-conscious emotions such as shame and guilt [8], trigger more anxiety [9]. Besides, procrastinators may be at a higher risk of experiencing depression [10]. Therefore, it is necessary for researchers, instructors and educators to find the reasons why college students procrastinate their academic tasks [11].

Solomon and Rothblum [6] divided the causes of procrastination in learning into three categories in the Procrastination Assessment Scale - Student (PASS). The first group is fear of failure, including anxiety of being judged, perfectionism and lack of self-confidence. The second group is resistance to the task, including laziness, objection to the task, fear of success, low

tolerance for frustration, peer influence and time management. The third group is other factors such as dependency, risk-taking, indecisiveness, rebellion against control, and difficulty in making decisions [6]. Meanwhile, Steel [12] categorized the causes and related factors of procrastination into four key areas: task characteristics, individual differences, outcomes, and demographics. The associated factors impacting on academic procrastination, such as gender and academic performance (GPA), have been examined in a large number of studies. For instance, the findings revealed that male students procrastinated more often on academic tasks compared to female students [13]-[15]. Remarkably, a higher proportion of female students attributed their procrastination to fear of failure and laziness, whereas male students were more likely to procrastinate because of risk taking tendencies and resistance to control [14]. According to Tuckman [16], students who procrastinate the most had an average class grade of 2.9 on a 4.0 scale. Those who procrastinated moderately achieved an average of 3.4, whereas students who procrastinated the least earned an average grade of 3.6. Similarly, a study involving 1019 university students found that academic procrastination was negatively correlated with academic performance ($r = -0.27$, $p = 0.00$), which indicates that students with higher academic achievement tend to procrastinate less [17]. However, these aforementioned studies were carried out in academic settings during traditional, face-to-face classes, and therefore may not fully capture the characteristics and behaviors of procrastination among learners in technology-supported online learning contexts, especially in Spark LMS. Besides, most existing studies on academic procrastination with LMS environments primarily focus on assignment submission data to predict course outcomes [18] - [20], rather than examining psychological or demographic factors such as gender or academic performance. Nonetheless, this study was conducted to fill this gap in the literature.

The present study aims to investigate the causes of academic procrastination among non-English major students of pre-intermediate levels using Spark and examine whether reasons for academic procrastination varies by gender, and GPA. Therefore, this research will answer the questions below:

1. What are the reasons of academic procrastination among non-English major students using Spark LMS?
2. Are there significant differences in procrastination reasons between male and female students?
3. Is there a correlation between students' GPA and their procrastination reasons?

2. Research methods

A total of 145 non-English major students did an online survey at <https://forms.gle/AucK4QomVGXXqzGq5>. The survey was developed based on the Procrastination Assessment Scale for Students (PASS) designed to assess the frequency of academic procrastination and its underlying reasons among students. The scale consists of 44 items with 18 items addressing academic procrastination itself and the remaining 26 items focusing on the factors contributing to it [10]. In this study, the survey was divided into 3 parts: Part 1 collected the students' information (7 questions); Part 2 measured the extent of students' procrastination of doing Spark homework (5 questions); and Part 3 investigated the reasons for procrastination (24 questions). In part 3, the questions consisted of 5 choices from completely disagree, disagree, neutral, agree and completely agree. The reasons for procrastination were divided into three groups: (1) fear of failure, (2) task resistance, and (3) other factors. The survey was conducted in Vietnamese to ensure the students could completely understand the questions. The data from the survey were coded and assessed by SPSS version 20.0. Simultaneously, mean and standard deviation of the questions were counted, and an ANOVA test was conducted by SPSS.

After the survey, 10 random students (5 males and 5 females) were chosen for deep interviews via Google meeting. They were asked three questions: "What is the most important reason for your procrastination?", "Do you have any suggestions for students'

procrastination?” and “What should lecturers do to limit students’ procrastination?”. All the answers were typed, using Word software in the order of the questions and coded with participants’ names for convenient citation and information confidentiality. Interviewers used Vietnamese for communication easily.

3. Results and discussion

3.1. Demographics

Table 1 shows the information of participants that responded to the survey. There were a total of 145 responses. Among them, 59 were males and 86 were females, studying in different majors from several faculties (Faculty of Fisheries, Economics, Tourism, Law, Business Management, Mechanical Engineering, Information Technology, Food Technology, and Biotechnology and Environment). Most of the participants are at a pre-intermediate level of English proficiency based on CEFR standards. Also, out of 145 participants, 55 participants were freshmen, 58 were sophomores, 12 were third-year students, 17 were fourth-year students, and only 3 were undergraduate students. All of the participants were of various ages, ranging from 19 to over 22 years old. In addition, the participants were categorized into three groups: low (GPA < 2.5), medium (GPA 2.5 - 3.49), and high (GPA ≥ 3.5). The results showed that 33 students had the low GPA, 102 students had medium GPA, and 10 had high GPA.

Table 1. Participants’ demographics

Demographics	Sub-component	N	%
Gender	Male	59	40.7
	Female	86	59.3
Age	19 - 20	112	77.2
	21 - 22	30	20.7
	Above 22	3	2.1
Study year	First year	55	37.9
	Second year	58	40
	Third year	12	8.3
	Fourth year	17	11.7
	Fifth year	3	2.1
GPA	Low (0 - 2.49)	33	22.8
	Medium (2.5 - 3.49)	102	70.3
	High (3.5 - 4.0)	10	6.9
Learning motivation	Low	19	13.1
	Medium	115	79.3
	High	11	7.6

Table 2. Participants’ responses to their engagement with Spark homework

Questions	Yes		No	
	N	%	N	%
1. Do you finish the online homework on time?	144	99.3	1	0.7
2. Did you do the online homework in the first week?	65	44.8	80	55.2
3. Did you do the online homework every week?	88	60.7	57	39.3
4. Did you delay the online homework until the middle of the semester?	60	41.4	85	58.6
5. Did you delay the online homework until the end of the semester?	14	9.7	131	90.3

When it comes to students’ engagement with Spark homework (Table 2), the data reveals that a majority of students (99.3%) complete their homework on time, which reflects a strong sense of responsibility and adherence among the participants. However, 41.1% of students delayed their homework until the middle of the semester, and 9.7% postponed it until the end of the term. These figures highlight the presence of procrastination behaviors in a substantial subset of students.

3.2. Reasons for procrastination behavior

3.2.1. Fear of failure

When comparing the mean scores between male and female students in Table 3, the data reveal that the male students scored higher than the females on all the procrastination-related reasons. This finding contrasts with some previous studies. A significantly higher number of female students than male students reported increased academic procrastination because of fear of failure, laziness and organizing [14], [21]. The quantitative results suggest a notable shift in the gender-related patterns of academic procrastination. Male students in this study demonstrate higher levels of procrastination for reasons traditionally associated with female students.

The results of the one-way ANOVA analysis (Table 3) show that there is a significant difference between GPA groups only in Item 1, with $p = 0.028 (< 0.05)$. This indicates that students with low GPAs tend to procrastinate due to a lack of understanding more frequently than those with high GPAs. Steel [12] argues that academic ability and confidence in one's understanding are strong predictors of academic procrastination. When students do not understand the lessons, they are more likely to delay tasks in order to avoid feelings of failure or stress. According to Zimmerman [22], low-achieving learners often lack self-regulated learning skills, which leads to procrastination as a form of academic task avoidance. However, other factors such as fear of being judged or reluctance to ask questions in class may also contribute to this behavior.

Table 3. Gender and GPA differences in fear of failure

Items	Mean Score (T-test)		One-way ANOVA
	Male	Female	GPA
1. I procrastinate on Spark homework because I don't understand the lesson.	2.7119	2.7209	0.028
2. I procrastinate on Spark homework because I'm not confident in my abilities.	2.7627	2.6512	0.230
3. I procrastinate on Spark homework because I'm afraid to ask the teachers.	2.4915	2.3372	0.127
4. I procrastinate on homework because I'm afraid of being disappointed with the results.	2.6780	2.4186	0.373
5. I procrastinate on Spark homework because I feel overwhelmed by the assignments.	3.0339	2.9419	0.258
6. I procrastinate because I'm afraid of being judged.	2.4407	2.2326	0.467
7. I procrastinate because I can't accept low results.	2.8136	2.3953	0.311

3.2.2. Task resistance

Table 4. Gender and GPA differences in task resistance

Items	Mean Score (T-test)		One-way ANOVA
	Male	Female	GPA
1. I procrastinate because I hate doing homework.	2.5254	2.2907	0.126
2. I procrastinate to do something more interesting.	2.7966	2.4186	0.837
3. I procrastinate because the homework takes too much time.	2.8136	2.5814	0.359
4. I procrastinate because I feel lazy to do it.	2.6271	2.5116	0.644
5. I procrastinate because I need time to review the lesson from class.	3.1356	3.1628	0.863
6. I procrastinate because I have too much work to do.	3.4068	3.2558	0.317
7. I procrastinate because I can't manage my time well.	2.9153	2.9186	0.700
8. I procrastinate because I often get distracted by other things.	3.0847	2.7907	0.571
9. I procrastinate because I have poor concentration.	2.8814	2.5000	0.269
10. I procrastinate because I like doing homework at the last minute.	2.4237	2.1047	0.100
11. I procrastinate because my classmates haven't done it either.	2.4407	2.1860	0.076
12. I procrastinate because my friends invite me to do other things.	2.3898	2.2209	0.110

As seen from Table 4, male students tend to procrastinate more than female students across most of the surveyed reasons, including lack of study motivation, being distracted or prioritizing other activities, habitual procrastination, peer influence, and poor self-management. These findings are consistent with the study by Steel [12], who argued that male students tend to procrastinate more due to lower self-regulation and a greater inclination toward leisure or risk-taking behaviors. In contrast, female students in the present study scored higher than males on the reason “needing time to review the lesson,” which reflects a preparation-based delay rather than avoidance-based procrastination. This is because girls are more likely to employ study strategies that involve planning and reviewing, enhancing time management and increasing study efficiency [23]. Another noteworthy factor is academic workload (i.e., having too much to do), which was rated highly by both male and female students. This suggests a universal cause that goes beyond gender differences. It aligns with the current context in which students are facing heavy academic demands, leading to cognitive overload and an increase in procrastination as a coping mechanism.

However, the comparison between GPA groups reveals no significant differences, as the p-values were greater than 0.05. In some items, such as “liking to do homework at the last minute,” “classmates haven’t done it yet,” or “friends invite me to do other things,” the p-values were close to the significance threshold, suggesting that social influences and personal habits might affect the degree of procrastination among different groups. The ANOVA results in this study may be attributed to a limited sample size or external factors such as academic pressure, workload, or online learning environments, which may have made procrastination a common behavior among most students.

3.2.3. Other factors

Table 5 shows that male participants scored higher than the females across all five reasons in this category. Male students were more likely to procrastinate on Spark homework due to waiting for the teacher to explain the lesson ($M = 2.8305$ vs. 2.7209) and waiting for help ($M = 2.5085$ vs. 2.3140). Additionally, male students reported higher procrastination due to feeling controlled ($M = 2.4576$ vs. 2.2558) and difficulty in decision-making ($M = 2.6610$ vs. 2.3488). Interestingly, male students also scored higher on procrastination due to indecisiveness ($M = 2.6271$ vs. 2.4535) although traditional studies have often associated indecisiveness with female students due to anxiety or perfectionism [12]. This may indicate a shifting pattern of academic procrastination in today’s higher education context, where male students also experience pressure related to academic workload and decision-making, particularly in online learning environments such as Spark LMS.

Regarding GPA, the ANOVA analysis also revealed no significant differences among GPA groups in terms of the reasons for procrastinating on Spark homework ($p > 0.05$). These procrastination behaviors were not significantly influenced by gender or academic performance. In other words, procrastination appears to be a relatively common and systemic phenomenon rather than one confined to a specific student group.

Table 5. Gender and GPA differences in other factors

Items	Mean Score (T-test)		One-way ANOVA
	Male	Female	GPA
1. I procrastinate on Spark homework because I wait for the teacher to explain the lesson.	2.8305	2.7209	0.848
2. I procrastinate on homework because I wait for help.	2.5085	2.3140	0.174
3. I procrastinate on Spark homework because I don’t want to be controlled.	2.4576	2.2558	0.261
4. I procrastinate on homework because I lack decisiveness.	2.6271	2.4535	0.367
5. I procrastinate on homework because I can't make a decision.	2.6610	2.3488	0.252

3.3. Results of the interviews

The qualitative analysis of students' responses to open-ended questions provides a deeper understanding of the underlying causes and potential solutions to academic procrastination, particularly in the context of Spark homework. When asked about the most important reason for academic procrastination, three out of five female participants cited poor concentration and external distractions, such as social media (e.g., TikTok) as key barriers to timely task completion. For example, one female stated, *"I distracted easily-just start working a bit then end up scrolling through TikTok"* (F1). Male students were more likely to mention lack of interest or external motivation as primary reasons for procrastination. One male participant stated, *"I procrastinate because I don't find it appealing,"* (M1) while others highlighted their procrastination due to approaching deadlines or a lack of understanding of the lesson. The student M5 said that *"I think it's because the deadline hasn't arrived yet. Some students tend to wait until it's close to the due date to start doing the homework, or they wait for others to finish first so they can copy the answers."* In contrast, female participants mentioned being overwhelmed by workload, poor time management, or needing to prioritize other subjects. For example, one female student noted, *"I have too many subjects to study, so I need to prioritize assignments with closer deadlines"* (F5) while another cited, *"I can't manage my time well, especially with multiple deadlines from different courses"* (F4). The results from this question are consistent with previous research indicating that challenges in time management, lack of motivation, and external distractions are key contributors to academic procrastination [12], [24]. Furthermore, the gender differences echo studies which found male students often procrastinate due to lower intrinsic motivation, whereas female students tend to procrastinate due to over-commitment or perfectionism [14], [25].

For the second question *Do you have any suggestions for students' procrastination?*, students proposed a range of strategies to mitigate procrastination. Time management emerged as a recurring theme. Many students suggested dividing Spark homework into weekly chunks with clear deadlines. Three female students recommended regular reminders, time-blocking techniques, and incentives for early submissions. Meanwhile, other students suggested that lecturers should make assignments more engaging, providing answer keys, and reducing difficulty levels, all of which support increased task initiation and intrinsic motivation. Such strategies highlight the importance of cognitive and emotional design in online assignments, especially in asynchronous learning contexts where students must self-regulate. One male student recommended gamifying or making tasks more appealing *"Designing tasks that look more engaging so students feel like doing them"* (M1). These suggestions resonate with research by Schraw, Wadkins, and Olafson [25], who emphasized the importance of structural support, clarity, and perceived value in reducing procrastination.

In the last question, when the students were asked what lecturers should do to limit students' procrastination, five participants believed that frequent reminders and lecturer support were effective ways in reducing procrastination: *"Give reminders and deduct process marks if needed"* (M2), *"Regularly remind students to complete Spark assignments"* (M3), *"Give frequent reminders"* (F2), *"Remind and support students"* (F3), *"Lectures should give frequent reminders"* (F5). These responses emphasize the pivotal role of lecturers in influencing students' engagement and time management in online learning platform. On the other hand, two students suggested reward points for early submissions or completing assignments on time as a motivational strategy: *"bonus points can be awarded for submitting on time"* (F5), *"rewards should be given to encourage early completion"* (M4). The emphasis on regular check-ins and reward-based encouragement highlights that in LMS - based environments like Spark LMS, learners are more likely to stay on task when instructors provide external scaffolding, especially through frequent interaction, formative assessment, and goal-setting strategies. These pedagogical techniques contribute to the development of students' self-regulation over time, a

key factor in overcoming procrastination [22]. In addition, the implementation of clear deadlines and penalties was seen as a means of reinforcing student accountability. However, one participant claimed that lectures should not intervene, and procrastination is a matter of individual self-discipline. It emphasized that learner autonomy is the best way to avoid procrastination: “*Nothing needs to be done, it depends on each individual’s self – discipline*” (M1).

4. Conclusion

This research studied the causes, and gender - and GPA-related differences in academic procrastination among non-English major students using Spark LMS at Nha Trang University. The results revealed that a significant portion of students exhibits procrastination behaviors, particularly delaying assignments until the middle or end of the semester. Quantitative findings showed that male students reported higher levels of procrastination across most reasons, including task resistance, fear of failure, and poor self-regulation. Meanwhile, female students were more likely to procrastinate due to workload management and a desire to prepare thoroughly before beginning tasks, reflecting a preparation-based delay rather than avoidance. These results challenge traditional stereotypes about gender and dependency, suggesting a shifting pattern of procrastination behavior in digital learning environments. Interestingly, no significant differences were found among GPA groups, indicating that procrastination is a pervasive issue across academic performance levels. Both high- and low-achieving students reported similar reasons for delay, such as lack of time, academic overload, or poor concentration.

Qualitative data reinforced these findings, highlighting that external distractions, lack of interest, and feeling overwhelmed are common reasons for procrastination. Students also offered practical strategies, such as breaking tasks into smaller parts, regular reminders, and motivational incentives - emphasizing a strong metacognitive awareness of their learning challenges. Moreover, lecturers were also found to play a crucial part in reducing students’ academic procrastination. It can be concluded that regular reminders, supportive guidance, and clear deadlines are perceived as effective strategies. However, learner autonomy remains a crucial long-term solution.

Overall, this study confirms that academic procrastination on Spark LMS is a multifaceted and systemic issue, not solely tied to personal laziness or weak motivation. To address this, educators should adopt a multi-pronged approach, combining structured task design, continuous guidance, and emotional support. Future research could expand this inquiry to include longitudinal tracking or intervention-based studies that test the effectiveness of different instructional strategies in reducing procrastination.

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