

## An investigation of the relationship between students' self-discipline and their language performance in an online learning context at a Vietnamese university

Pham Hai Yen<sup>1\*</sup>, Hoang Thi Thanh Huyen<sup>1</sup>

<sup>1</sup> School of Languages and Tourism, Hanoi University of Industry, Vietnam

\* Corresponding authors' email: [yenph@hau.edu.vn](mailto:yenph@hau.edu.vn)

 <https://orcid.org/0009-0001-9550-568X>

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### ABSTRACT

**Keywords:** self-discipline, online learning, language performance, EOP

Having recognized the difference in the implementation of English lessons in physical classrooms and distant classrooms, which possibly influence learners' performance, the authors are interested in examining the impacts of students' self-discipline on language performance in an online learning situation. In this study, the authors employed two main research instruments, including (1) a widely used survey questionnaire aiming at investigating participants' level of self-discipline and (2) a database from English Occupational Purposes, a web-based English learning system to assess learners' language performance. Research results have shown a direct correlation between subjects' level of self-discipline and their English language performance, in which a low level of self-discipline is a partial contributor to poor learning performance and vice versa. Also, the findings of the research showed an inconsiderable difference in the learning outcomes of the high group and the medium group in several aspects.

### Introduction

Given the persistence of the COVID-19 pandemic, which prohibits teachers and students from taking face-to-face classes, online learning has become a new norm in education (Shivangi Dhawan, 2021). Simply put, learning is no longer confined to the four walls of the classroom but can happen at any time and place as learners wish (Le & Nguyen, 2022). It is undeniable that innovative teaching and new learning system has stimulated learners' and teachers' creativity. This resulted in adapting the teaching-learning process, such as the teaching method, management system, and learning strategies, to name a few. Teaching has shifted from face-to-face classes to distant classes, which is synonymous with the increasing application of technological teaching and learning tools. Unsurprisingly, this has required teachers and learners to acquire relevant skills so that they can cope with the prevailing learning context.

Moreover, learners are advised to facilitate their self-study capacity due to its significant role in almost all online courses.

In summary, due to specific characteristics of the online environment, challenges caused by online teaching and learning cannot be avoidable (Pham, 2022), which inevitably influences learning outcomes. Although students seem to be more accessible to learning recourses, and this has brought about undeniable advantages for students, distance learning highly acquires students' ability to get familiar with all course materials, follow a recommended learning route, adhere to time constraints, and complete all needed tasks (Gorbunovs, Kapenieks, and Cakula, 2016). In other words, self-discipline is an essential skill in the era of online learning (Shivangi Dhawan, 2021). Given that, self-discipline can be regarded as a contributor to brilliant academic performance. Despite this, research on this area is in its infancy.

In line with the prevalence of remote learning, Hanoi University of Industry has integrated online learning courses in teaching English for non-majored students for 7 years. This language teaching policy not only reduces the time of face-to-face lessons but also strongly increases learners' self-study capacity and facilitates their self-discipline given the course requirements. With this, Hanoi University of Industry English teachers have gained greater familiarity with remote teaching. However, the practice of productive language skills took place in physical classrooms. Therefore, in order to adapt to the new teaching-learning circumstance in the Covid-19 pandemic, physical lessons have transformed completely with the utilization of innovative teaching tools and remote classes, which is assumed to come along with difficulties in managing the classes. Hence, teachers can reflect on their students' level of self-discipline and plan teaching tactics to increase learning efficiency based on the findings of this study.

## Literature review

### *Self-discipline*

Self-discipline is regarded as the ability to resist desires, regulate emotions, control one's mind, and adjust their behaviors for the long-term goal (de Ridder, Lensvelt-Mulders, Finkenauer & Stok, 2012). Also, Hagger (2013) emphasized that self-discipline characterizes various forms, for example, perseverance, endurance, thinking before acting, and finishing things. Other features of self-discipline are the ability to carry out one's plans regardless of hardships and inconveniences and resist the temptations that might cause repercussions (Sasson, 2016). Given that, a high level of self-discipline is believed to facilitate success, better achievements, and reaching goals. Baumeister and Tierney (2011) concluded in their paper that students' level of self-discipline could help predict their achievement in university.

In digital learning, students must access websites and use a wide range of technological tools to take lessons and interact with others. Not being within the boundaries of schools and classes, students are vulnerable to bad distractions, and the Internet itself is a big temptation. Obviously, any distractions and temptations can deteriorate the learning process and decrease learning

efficiency. Therefore, it is essential for students to keep themselves regulated so that their academic performance can be intact.

### *Online learning in a digital age*

Many terms define the situation in which students attend lessons digitally from home, including online learning, e-learning, remote learning, and distance education (Gelles et al., 2020). Although distance learning has been commonplace for a long period of time, its significant importance has never been emphasized until the outbreak of COVID-19. Given that, research in this field has been increasing dramatically.

Among four determining factors, namely online work skills, online learning efficacy, self-discipline, and socialization that are considered to have profound impacts on students' learning outcomes in e-learning (Joosten & Cusatis, 2020), self-discipline is believed to have a positive relationship between online learning effectiveness and play a pivotal role in the success of online courses (Waschull, 2005). However, this conclusion needs further backup research findings due to the diverse online learning methods which underlie this study.

### *Language performance*

According to Chomsky (1965), language performance, or linguistic performance, is the actual use of language in concrete situations. The term refers to both the production and the comprehension of language. Unlike linguistic competence, which is regarded as learners' theoretical knowledge of a language, language performance is understood as learners' practical knowledge of the language. That means linguistic performance can degenerate in quality because of the errors, corrections, or hesitations that speakers tend to make when producing sentences. When asked to perform a hands-on task, language performance is assessed using clearly defined criteria to evaluate how well students achieved the application specified by learning targets (Nitko, 2001). Two language aspects can be examined, including the students' product and the process they use to complete the product (Nitko, 2001). Besides, performance assessment measured candidates' ability to perform a particular task that was usually relevant to jobs or study requirements. (Davies et al., 1999).

In this research, the authors explored participants' levels of self-discipline and investigated the correlation between self-discipline and language performance. In order to examine participants' language performance, the authors have collected data from a web-based English learning system which included their language products and provided details of their English studying progress. To be more precise, their productive language work was uploaded on the website. Together with the number of completed tasks, the average scores of unit tests that students were required to take after each unit and their score on the final test, which took place at the end of the course, were collected and went through analysis to answer the research's questions.

### *English Occupational Purposes (EOP)*

EOP is a web-based English learning platform developed by the Hanoi University of Industry. This English learning website not only promotes students' self-study but also keeps lecturers informed about their student's learning results by checking out the system's reports and providing them with details about their learning process. More importantly, lecturers can deliver their feedback and scores on students' work remotely.

Studying on EOP is a compulsory task for all students before attending English lessons in either remote or physical classrooms. In fact, students are required to complete a wide range of language tasks with relevant topics. After finishing each unit, students must take a unit test that aims at assessing what they have learned in the unit. Also, the learning resources put emphasis on the productive skills that are speaking and writing, whose products are marked in every unit. Moreover, the system allows teachers to keep track of their student's learning progress through weekly online reports.

### *Self-Control Scale (SCS)*

Originally, SCS contained 36 items rated on a 5-point scale (1 = strongly agree; 5 = strongly disagree). With five dimensions, including general capacity for self-discipline, deliberate/non-impulsive action, healthy habits, work ethics, and reliability, the questionnaire examines respondents' ability to override or change responses, interrupt undesired behavioral tendencies and refrain from acting on them (Tangney, Baumeister and Boone, 2004). In this study, given the research's rationale, which is measuring participants' level of self-discipline in e-learning, there are only 26 items, including 11 items referring to general capacity for self-discipline, ten items referring to deliberate/non-impulsive action, and five items referring to reliability in the questionnaire. The detailed survey was attached to the paper's appendix. Tangney et al. (2004) believed that the level of self-control has a close relationship with academic performance. Specifically, higher scores on self-control correlate with a higher grade point average; meanwhile, the opposite result can lead to several interpersonal problems. Therefore, the development of self-discipline is strongly encouraged (Uziel & Baumeister, 2017). Unlike primary school and high school educational environments, tertiary education involves no parental control, and the curriculum is much more flexible in the online learning era. Hence, low self-control in college students is likely to generate negative consequences (Stephenson, Heckert & Yerger, 2020). In this regard, the role of self-discipline in the life of university students should be examined and emphasized. With this, the authors aimed to explore participants' self-discipline levels and compare different groups of self-discipline regarding their language performance.

### *Research Questions*

This paper aims to seek the answers to the following questions:

What is the participants' level of self-discipline?

How does self-discipline affect participants' language performance?

## Methods

### *Design of the study*

The authors employed a quantitative method of research in this study. At first, the questionnaire was distributed to 120 participants to investigate their level of self-discipline. After collecting the data from a questionnaire, the authors carried out the analysis and categorized the participants into three groups. Accordingly, the learning results of each group on EOP were assessed and sorted out using mainstream tools: Excel.

### *Participants*

The study was conducted at the end of the first semester of the academic year 2021-2022, in which all lessons were conducted in a virtual setting due to the outbreak of a respiratory virus, COVID-19. To be more specific, it involved the participation of 120 freshmen studying different majors such as Information Technology, Business Administration, or Hotel Management at Hanoi University of Industry. Among them, there were 40 females and 80 males. And the participants' language proficiency was equivalent to level A2 in CEFR.

All of the participants took English lessons from the authors, so the authors have been authorized to access their studying process and results in EOP. Moreover, the study involved 120 participants to ensure the reliability of quantitative research.

### *Questionnaire*

The authors employed Brief Self-Control Scale (Tangney, 2004) to investigate participants' level of self-discipline. The questionnaire was designed on Likert Scale with 5 degrees from 1 (strongly agree) to 5 (strongly disagree). As mentioned earlier in this paper, the Self-Control Scale is widely used for investigations of the association between self-control and various outcomes (Ferrari, Stevens, & Jason, 2009). However, with the purpose of exploring the relationship between different groups of self-discipline and their language performance, the authors tailored the original Scale by erasing three items related to generic nature and seven items related to impulsivity.

Items of the Brief Self-Control Scale were attached to the appendix of the paper. The questionnaire was distributed to the participants remotely through Google Forms. Next, collected data was then calculated, sorted out, and grouped up into three main categories by the authors. Results would be illustrated in graphs in the later part of this paper.

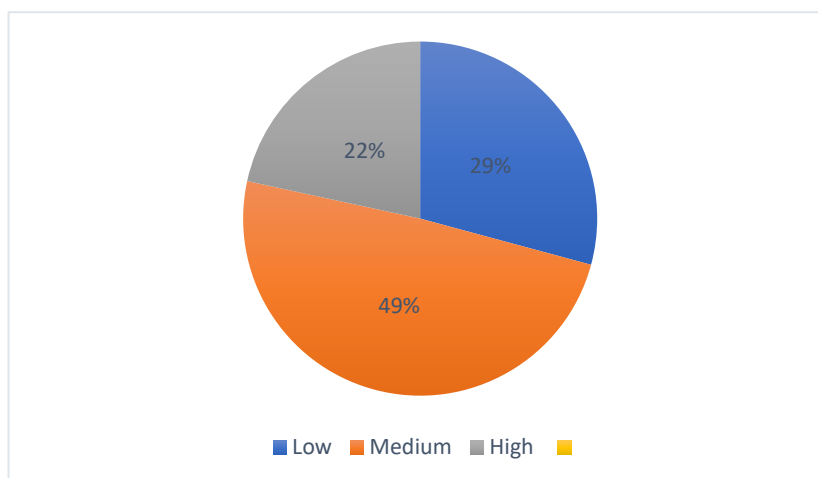
### *Database from EOP*

Data from EOP includes four categories which are: (1) the total number of tasks that each participant completed at the end of the course, (2) their average grade on speaking and writing work which was their speaking recordings and writing documents, (3) their average scores of unit tests, a test that they took after every unit and (4) their score of the final test were collected to investigate participants' learning outcomes. Data was collected through online reports of the system, then calculated by the authors. The results proceeded to be illustrated in a table and a graph in the following section.

## Results/Findings and Discussion

### *Students' level of self-discipline*

Chart 1. Participants' level of self-discipline



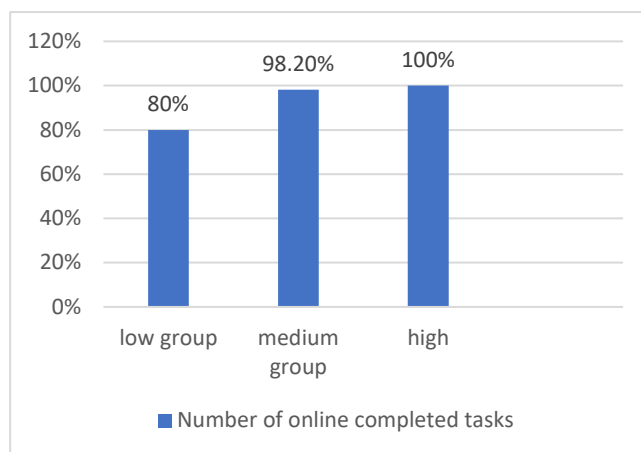
The questionnaire was designed on Likert Scale with 5 degrees: 1 (strongly agree), 2 (agree), 3 (neither agree nor disagree), 4 (disagree), and 5 (strongly disagree). Therefore, the maximum score that can be obtained from the Scale is 130, and the minimum score is 26. Scores ranging from 26 to 77 indicate a lower level of self-discipline. Scores ranging from 78 to 103 indicate a medium level of self-discipline, and a score higher than 103 indicates a high level of self-discipline.

Results from the questionnaire indicated that the majority of participants identified themselves as ones with a medium level of self-discipline (their scores varied from 81 to 101). It can be seen in Chart 1 that almost half of the participants (49%) belong to the medium-level of self-discipline group; meanwhile, the percentages of students having a low and high level of self-discipline are similar to 29.2% (the scores varied from 50 to 70) and 21.6% (the scores varied from 110 to 115) respectively.

### *The relationship between students' level of self-discipline and their English learning outcomes*

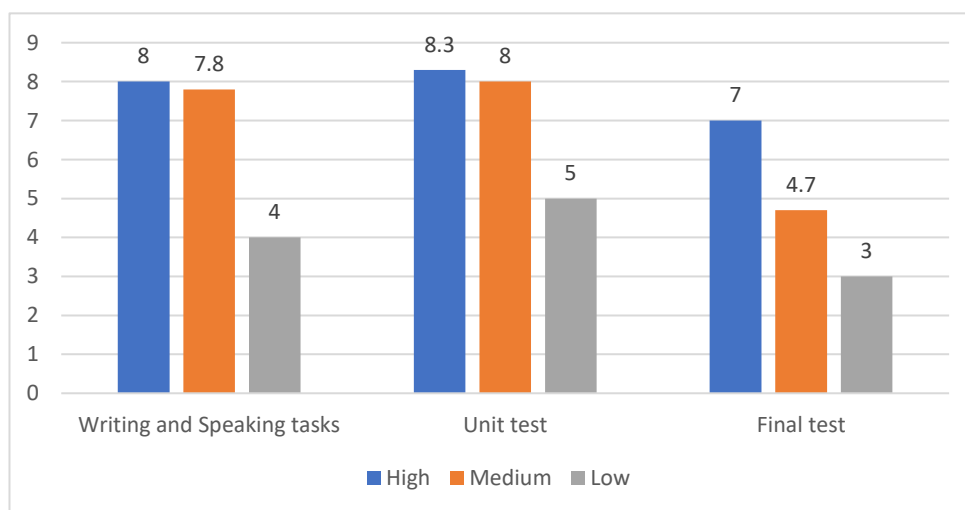
After identifying the participants' self-discipline level, the authors compared the language performance of every group based on their learning results from the web-based English learning tool (EOP) using Excel to explore the relationship between their level of self-discipline and their language learning results. The results were demonstrated by the following charts.

Chart 2. Number of online completed tasks



A database from EOP explored the relationship between three groups of participants and their language performance. First of all, chart 2 shows that there is a slight difference in the total number of completed tasks. To be more specific, participants with a high level of self-discipline accomplished all of the tasks; whereas participants in medium groups missed a few tasks. Especially, the percentage of the low group is the lowest of the three in this category.

Chart 3. The average scores of participants in three categories



As for the average scores, it is interesting to note that when analyzing the data in writing and speaking tasks, the authors explored that the difference in the high and medium groups is insignificant. Both students in the two groups achieved around 8 points, which students' average score in the high group was slightly higher. In contrast, data of the low group is in the opposite trend; that is, participants' average scores are 4 and 5 in writing and speaking tasks and unit tests, respectively. Clearly, the results have shown a significant distinction between the low group and the others. Finally, Chart 3 shows that the scores of the final test are in correlation with the level of self-discipline, that means participants with high self-discipline completed the course with the highest point (around 7), and those in the low group got the lowest point with 3 points; meanwhile, students in medium groups got average point (around 5). In this research,

the results have shown that self-discipline relates closely to language performance. In fact, this finding was mentioned in Michalis's research in 2021 on self-discipline. She concluded that "self-discipline is oriented towards successful performance outcomes by overcoming impediments". Self-discipline can predict success in academic performance since learners with high self-discipline can overcome the temptation of recreational forms such as TV programs or games and choose the learning despite boredom and frustration. Also, in a study on self-discipline as a key indicator to improve learning outcomes (Gorbunovs, A, Kapenieks, A, Cakula; 2016), they found that a choice of information system, tools, technology, and methodology did not impact learner achievements so much as they depend on self-discipline. However, the study did not give comparisons between different groups of self-discipline.

Although the distinction between the high and medium groups in almost all aspects examined, except for the final test score, is insignificant, the research has shown that participants in the high group delivered the best language performance of all. Furthermore, participants in the medium group did not perform well in the final test. On the contrary, participants in the low group did not perform adequately to be recognized as completing the course, and all of them must retake the course. In particular, the research results have indicated that students in this group were not awarded average points for their work and their tests despite the fact that they finished almost all of the online tasks. This is because they are obliged to complete the online tasks before attending the lessons which have been mentioned earlier in this paper. However, due to the serious deficiency of self-discipline, which means they were unable to resist distractions and temptations, their studying results have been affected immensely.

The findings of this research have indicated the correlation between learners' level of self-discipline and their language outcomes in the online learning context. To be more specific, participants of the study were categorized according to the result of the questionnaire. 22% belonged to the low group of self-discipline, 49% belonged to the medium group of self-discipline, and the rest belonged to the high group of self-discipline. Results from the analysis of a database of EOP have shown that students with high self-discipline delivered the highest language results and completed all of the online learning tasks; meanwhile, their peers in the low group of self-discipline merely achieved the average scores for the test and their language output assessment despite the considerable accomplishment of online tasks. This finding has profoundly justified the direct correlation between learners' self-discipline and their language outcomes.

#### *Suggestion for Further Research*

This study only focuses on the comparisons between the level of self-discipline and English learning outcomes. The authors hope that professionals will conduct more similar studies on larger sample sizes with different contexts and participants to reinforce the outcomes of this research in the future. Furthermore, it would be great for teachers and lecturers to carry out in-depth studies on the impacts of self-discipline on other aspects of learning and the characteristics of learners. It is also highly recommended that research on a group of students with poor self-discipline is emphasized for the purpose of helping them to increase their self-



discipline, which in turn generates effective learning. In addition, research instruments should be varied using surveys, interviews, and observations. Teachers should be involved in the research to provide their perspectives.

## Conclusion

The authors found that most of the students had a medium level of self-discipline (around 50%), and 29.2% of participants had a low level of self-discipline. Only around 20% of participants had a high level of self-discipline. Also, the study showed the relationship between the level of self-discipline and language performance. Students in the high group performed the best, and there was a slightly inferior in the medium group. Meanwhile, participants in the low group had the lowest studying results, which was discussed earlier. To sum up, the research's findings might help teachers plan useful teaching strategies to tackle students with low level of self-discipline and recognize the importance of self-discipline capacity and the roles of teachers in e-learning.

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## Appendix

### Items in Self-Control Scale

I am good at resisting temptation.

I have a hard time to break bad habits.

I am lazy.

I say inappropriate things.

I never allow myself to lose control.

People can count on me to keep on schedule.

Getting up in the morning is hard for me.

I change my mind fairly often.

I blurt out whatever is on my mind.

People would describe me as impulsive.

I refuse things that are bad for me.

I keep everything neat.

I am self-indulgent at times.

I wish I had more self-discipline.

I am reliable.

I do many things on the spur of the moment.

People would say that I have iron self-discipline.

I have worked or studied all night at the last minute.

I'm not easily discouraged.

I'd be better off if I stopped to think before acting.

Pleasure and fun sometimes keep me from getting work done.

I have trouble concentrating.

I am able to work efficiently towards long-term goals.

Sometimes I can't stop myself from doing something, even if I know it is wrong.

I often act without thinking through all the alternatives

## Biodata

Pham Hai Yen holds an MA in English teaching Methodology from Hanoi National University of Education. She has been teaching English at Hanoi University of Industry for five years. She carried out some research on English phonetics and has raised interest in researching learning attitudes lately.

MA. Hoang Thi Thanh Huyen has been an English teacher at Hanoi University of Industry for 12 years. She used to work at a University in Danang City for 3 years after her graduation. She is now responsible for teaching and preparing materials for English for Information Technology for freshmen. Her main interest is Technology enhanced learning.