

Academic Procrastination among Indonesian University Learners: Interaction with Cheating, Absenteeism, and L2 Achievement

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ABSTRACT

Background. Many studies suggested that academic procrastination is particularly prevalent among learners at university level. However, empirical data on the interactions between academic procrastination and, respectively, learners' attitudes towards cheating (AtC), absenteeism, and learning achievement, are either generally inconclusive or non-existent, especially in English as Foreign Language (EFL) literature. Thus, it is worthwhile to conduct a study to examine these issues in the Indonesian EFL context, home to one of the largest communities of EFL learners in the world.

Purpose. The aim of this study was to investigate academic procrastination of Indonesian EFL learners at university level and the interactions of these learners' procrastination with AtC, absenteeism, and second/foreign language (L2) achievement.

Method. The study used an online survey method and 164 learners from non-English departments participated in this study.

Results. On the basis of descriptive statistics, it was found that the participants reported a moderate level of procrastination in English class. Furthermore, this study found that learners' procrastination significantly and positively correlated with their AtC and absenteeism. This indicated that the more learners procrastinated, the higher their approval of cheating behaviour, and the more likely they were to be absent in English classes. The predictive power of learner procrastination was 16.4% on AtC, and at 8.3% on absenteeism. Moreover, the study also found a significant, negative, and moderate relationship between learner procrastination and their L2 achievement with learners' procrastination being able to predict 16.5% of the total variance in L2 achievement.

Conclusion. Teachers are suggested to promote project-based tasks in groups where the step-by-step progress of learners is continually monitored, feedback given, and rewarded. This could discourage procrastination, absenteeism, as well as cheating behaviours, and potentially promote more optimal L2 achievement.

KEYWORDS

English as Foreign Language (EFL), academic procrastination, attitudes toward cheating, absenteeism, second/foreign (L2) achievement

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INTRODUCTION

Etymologically, the term "procrastination" comes from the Latin word "procrastinate-" meaning "defer until the morning". Procrastination happens in daily life, including in academic environments where learners postpone working on or completing academic tasks (Alexander & Onwuegbuzie, 2007), hence the term academic procrastination. Ac-

ademic procrastination is a form of situational procrastination in which learners intentionally delay or defer works that must be completed (Schraw et al., 2007). Learners inclined towards academic procrastination may be aware or not aware that they are engaging in such behaviour (Janssen, 2015). Whilst academic procrastination may happen among learners from all levels of education (Swaraswati et al., 2017), this phenomenon is prev-



alent among learners at the university level (Gonda et al., 2021; Yurtseven & Doğan, 2019).

Interactions between Academic Procrastination and Learning Achievement

There seems to be a debate over whether procrastination merely has detrimental effects or it may have functional effects. Several researchers have stated that procrastination does not always influence learning in a negative way (Cao, 2012; Chu & Choi, 2005). Chu and Choi (2005) argued that procrastinators can be categorised into active and passive procrastinators. Whilst the passive tend to postpone working on tasks unintentionally, the active defer working on tasks because they know they work better under pressure (Chu & Choi, 2005). In other words, despite seemingly delaying, these active procrastinators have control of their tasks and have the intention of performing satisfactorily and meeting the given deadlines (Chu & Choi, 2005). In a similar vein, a study involving learners from undergraduate and graduate levels by Cao (2012) reported that some participants identifying themselves as procrastinators, did so because they felt confident with their abilities to obtain satisfactory results despite procrastinating. This suggested that they did not lose control of their work. A study by Babadoğan (2010) in Turkey reporting a non-significant association between procrastination and achievement may indirectly give support to the claim of these aforementioned researchers.

Despite the aforementioned claim on the possible functional effect of procrastination, many studies have suggested its detrimental effects. Several studies investigated the possible relationship between academic procrastination and L2 achievement in several different contexts such as in Turkey, Iran, and China (Akpur, 2017; Aydoğan & Akbarov, 2018; Kafipour & Jafari, 2021; Korkmaz et al., 2018; Yurtseven & Akpur, 2018; Zhang & Zhang, 2022). They suggest negative associations between procrastination and academic achievement. A study involving 211 Turkish university learners by Akpur (2017) found a significant, negative association between learners' academic procrastination and L2 achievement, $r(209) = -.58, p < .05$. In a similar vein, another study in a Turkish context by Yurtseven and Akpur (2018) also reported a significant negative association between the two variables, albeit at a weak level ($r = -.28, p < .01$). Slightly similar in findings, a recent study by Zhang and Zhang (2022) in China reported that learners' academic procrastination had a significant negative effect on the readability of their L2 writing. This indicated that the more learners procrastinated, the greater the decrease in the readability of their writing, suggesting a lower quality. Moreover, a recent study involving L2 learners of English from a medical department by Kafipour and Jafari (2021) even reported that learners' procrastination contributed to 90.8% of the total variance in the learners' L2 writing performance.

This highlights the contrasting views and findings on association as well as the causal relationship between academic procrastination and achievement. Therefore, more studies investigating the effects of academic procrastination on achievement are necessary. Moreover, in the Indonesian L2 context, home to the second largest community of English as Foreign Language (EFL) learners after China, such studies are still very limited, if not non-existent.

Possible Factors Affecting Academic Procrastination

There are several contributing factors or antecedents to academic procrastination. One of them is task aversiveness, referring to actions learners find unpleasant (Steel, 2007). Learners try to avoid aversive stimuli and as such, they try to avoid them, for instance by procrastinating. Aversion to a certain task could be attributed to various personal characteristics such as motivation. However, when learners find a task unappealing or even unpleasant, the more likely they are to defer working on it (Steel, 2007). Furthermore, teachers could also be antecedents of academic procrastination (Schraw et al., 2007). Teachers who expect less, who negotiate deadlines and who are not strict with grading could unintentionally promote procrastination. In comparison, learners are less likely to procrastinate knowing their teachers expect good-quality work (Schraw et al., 2007). Furthermore, several studies also reported the role of gender in affecting procrastination (Balkis & Duru, 2017; Roy & Banerjee, 2022; Zhou, 2018). A study in Turkey by Balkis and Duru (2017), for example, reported that male learners had a higher level of academic procrastination than females.

Interestingly, recent studies suggested that the use of the internet contributes to academic procrastination (Herdian & Zamal, 2021; Mohammadi et al., 2015; Wulandari et al., 2021). A study involving 30 Iranian learners of English by Mohammadi et al. (2015) found a medium positive relationship between internet use and academic procrastination, suggesting that the more the participants used the internet, the higher the tendency to procrastinate. Furthermore, two studies in general education in Indonesia also reported that learners procrastinated more during the Covid-19 pandemic-driven online learning (Herdian & Zamal, 2021; Wulandari et al., 2021). Herdian and Zamal (2021) further reported that learners' procrastination was at a moderate level. These findings suggest that the internet often seen as an incredible source of learning can also be a distraction for learners (Satsevich et al., 2021) for example if they access social media and entertainment sites when they are supposed to be participating in an online class or working on certain tasks. For this reason, a study on procrastination in an online learning context will be very useful for further studies in the field of procrastination in an online environment.

Cheating and Absenteeism: Potential Interactions with Academic Procrastination

Several studies, albeit quite limited in number, seem to be interested in the possible association between academic procrastination and academic dishonesty such as cheating. From the perspective of learning, cheating serves as a cognitive shortcut (Anderman & Murdock, 2007). As effective teaching requires learners to use self-regulatory, as well as complex cognitive strategies, cheating is seen by learners as a way to preclude these needs (Anderman & Murdock, 2007). Intuitively, cheating may closely be related to task aversiveness contributing to procrastination. Outside the L2 context, Oktaria et al. (2021) in their study involving learners from a medical department in Indonesia argued that academic procrastination is one of contributing factors to academic dishonesty, including cheating behaviours. However, their study eventually reported that there was no association between learners' academic procrastination with academic dishonesty. In comparison, a study in Iran by Saracaloğlu et al. (2021) reported that academic procrastination among graduate and undergraduate learners correlated positively and moderately with their attitude toward cheating. Thus, the relationship between procrastination and cheating has not been firmly established. Hence, it could be strategic to investigate the association between the two.

Another frequent phenomenon in various L2 learning contexts is absenteeism (Al-Mekhlafi, 2016; Subekti, 2020). A study involving Indonesian English teachers by Subekti (2020) reported the frustration of teachers with the high level of absenteeism among learners. Learners were reported to skip classes despite the efforts of teachers to remind them and despite knowing the consequences on their grades (Subekti, 2020). A study in Yemen by Al-Mekhlafi (2016) also reported discontent among teachers with attendance and motivation of learners in joining the English class. Absences could lead to learners falling behind their peers and having fewer opportunities to obtain complete class content (Al-Mekhlafi, 2016). This may also stimulate task aversion leading to procrastination. Hence, it could be worthwhile to conduct a study investigating the association between procrastination and absenteeism considering such studies are still rare in literature.

Considering these rationales, this study intends to answer the following research questions. First, what is the level of academic procrastination among Indonesian university learners in online English classes? Second, what is the relationship between the level of procrastination and, respectively, their attitudes toward cheating, absenteeism, and L2 achievement?

A study with the aforementioned research objectives in the relatively under-researched Indonesian L2 context could generally contribute to future studies on procrastination

concerning other relevant components in L2 learning in the online learning environment.

METHOD

Research Design

The study used a quantitative design by distributing an online Google Form questionnaire. The use of a quantitative design in this study was attributed to several factors. First, a large number of research studies on procrastination have been conducted quantitatively (Akpur, 2017; Aydoğan & Akbarov, 2018; Babadoğan, 2010; Korkmaz et al., 2018; Luján et al., 2021; Zhang & Zhang, 2022), suggesting the popularity in the field of procrastination across various contexts. Secondly, considering the scarcity of such studies in the Indonesian L2 context, such a quantitative study may produce generalisable data for further relevant studies in the Indonesian L2 context.

The online questionnaire used in the study consisted of several parts: explanations about the purpose of the study, consent forms, demographic information, eight questionnaire items on attitude toward cheating (AtC) in English class, and ten questionnaire items on academic procrastination in English class. The eight questionnaire items on AtC were adapted from a study by Carpenter et al. (2006) with the necessary adjustments to fit the L2 context of the present study. Likewise, the ten questionnaire items on academic procrastination, which would be the focus of the present study, were adapted from the Pure Procrastination Scale developed by Lien et al. (2014) in the field of psychiatry. For example, "I delay making decisions until it is too late" in the original questionnaire was modified into "Related to assignments from English class, I delay making a decision until it is too late" to help the participants contextualise their responses to the English class context. Four possible responses were available, "Strongly agree" (converted into 5 points), "Agree" (4 points), "Disagree" (2 points), and "Strongly disagree" (1 point). In the present study, the questionnaires on AtC produced .86 Cronbach's alpha coefficient and .86 McDonald's omega coefficient, indicating high internal reliability. Similarly, the questionnaires on academic procrastination produced .88 Cronbach's alpha coefficient and .89 McDonald's omega coefficient, indicating high internal reliability.

Research Setting and Participants

The research setting was General English (GE) classes Levels 1, 2, and 3 at a private university in Java, Indonesia. GE classes were non-credited matriculation classes taken by learners from various non-English departments. At the time of registration at the university, learners took a placement test to determine their English level at matriculation. They were required to pass GE Level 3 to be able to take a credited English for Academic Purposes (EAP) class in their re-

spective departments. Each level consisted of 16 meetings taken over a semester. At the time of data collection, the meetings were conducted online and most of these meetings were conducted synchronously through the Zoom platform with a 75-minute duration each. Additionally, some 500 learners enrolled in GE classes, with the majority of them taking Level 3.

From these 500 enrolled learners, 164 learners participated in the present study. Of these learners, 164 learners participated in the present study. Of these learners, 79 (48.2%) were males and 85 (51.8%) were females, with a maximum age of 22 and a minimum of 16 ($M = 19.27$). 118 (72%) were learners at GE Level 3, 40 (24.4%) were at GE level 2, and 6 (3.7%) were at GE Level 1. As the GE classes were conducted online, at the time of data collection these participants resided in various islands or regions. 124 participants (75.6%) resided in Java, 11 (6.7%) in Nusa Tenggara, 10 (6.1%) in Sumatera, 8 (4.9%) in Kalimantan, 5 (3%) in Papua, 3 (1.8%) in Sulawesi, 1 (0.6%) in Bali, and 2 (1.2%) in other islands or regions. They were from eight different departments and the details can be observed in Table 1.

Ethical Consideration

The study did not obtain any ethical clearance as there was no ethics committee at the university at which I worked prior to the data collection. However, this study faithfully employs several principles of research ethics. First, autonomy or voluntary participation was maintained through the distribution of a consent form (Cascio & Racine, 2018) to be completed by the prospective participants in the first part of the online questionnaire. The consent form detailed the purposes of the study, the expectations of the participants and their rights including that of being able to withdraw their participation at any time. This was to ensure that the participants understood the study before participating in it (Farrow, 2016; Weinbaun et al., 2019). Additionally, of 164 participants, 63 (38.4%) expressed their willingness to be invited for interviews, should follow-up studies be required.

This indicated the fairly high level of enthusiasm of the participants in the present study. The other 161 (61.6%) were not willing to be involved in any follow-up studies, demonstrating autonomy. Furthermore, the principle of beneficence or maximising the benefits for the participants (Weinbaun et al., 2019) was adhered to by making the questionnaire as simple and easy to complete as possible. Monetary rewards were also given to some randomly selected participants as a token of gratitude. Finally, the study also employed the principle of confidentiality (Ramrathan et al., 2016). Though the participants were required to write their names when filling out the questionnaire, these names were kept confidential and were not publicised in the report.

Data Collection and Analysis

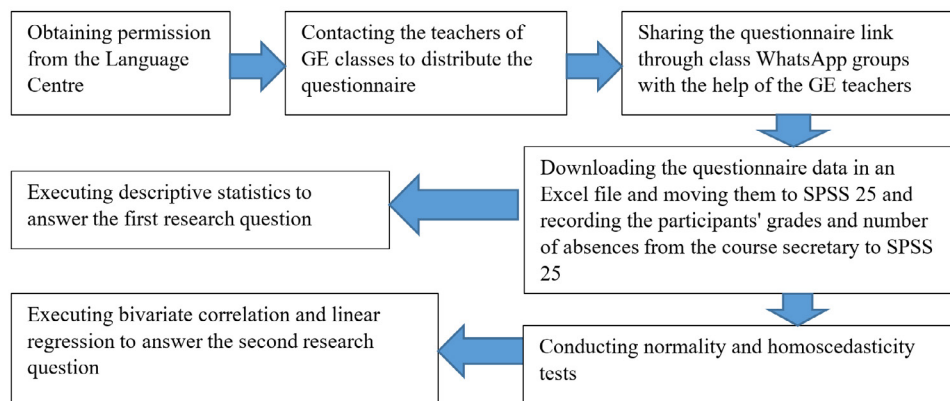
The data collection was conducted in the second semester of the 2021/2022 academic year. After permission to conduct the study was granted from the Head of the Language Centre, the organiser of the GE classes, the link of the online questionnaire was shared to learners taking GE classes by GE class teachers in their respective class *WhatsApp* groups and Learning Management System (LMS). The online questionnaire distribution was conducted from 9 May 2022 up to 27 May 2022. The questionnaire data was then downloaded in an Excel file and moved to SPSS 25 for further analysis. The data on the final grades and the total absences of the participating learners was obtained from the course secretary at end of the semester. This data was recorded to SPSS 25 per the names of the participants.

After all the necessary data had been recorded in SPSS 25, several procedures of data analysis were employed. First, descriptive statistics were used to answer the first research question on the level of academic procrastination among learners in English classes. The data was presented in the form of mean scores and percentages. Before parametric tests were performed, the data was tested for normality and homoscedasticity. After all the variables were found to be normally distributed ($p > .05$). Homoscedasticity tests

Table 1

The Learner Participants' Departments

No	Departments	Number of participants	Percentages (%)
1.	Accounting	23	14.0
2.	Architecture	24	14.6
3.	Biology	9	5.5
4.	Product design	5	3.0
5.	Informatics	33	20.1
6.	Medical	10	6.1
7.	Management	54	32.9
8.	Information System	6	3.7

Figure 1*The Flow of Data Collection and Analysis*

were performed and all the dependent variables, AtC, absenteeism, and L2 achievement had homoscedasticity. Next, bivariate correlation and bivariate (linear) regression formulas were used to answer the second research question on the relationship between procrastination and these components: AtC, absenteeism, and L2 achievement. The sequence of data collection and data analysis can be seen in Figure 1.

RESULTS

Learners' Academic Procrastination in Online English Class

The composite mean score of the ten questionnaire items on procrastination was 25.54, on a scale of 10 up to 50 ($SD = 7.75$). This indicated that in general terms, the learners who participated reported a moderate level of procrastination behaviours in English class. The detailed results in each of the items can be observed in Table 2.

As seen in Table 2, of the ten questionnaire - items on academic procrastination - items 4, 6, and 8 produced the highest mean scores. Item 4, "When working on assignments from English class, I often waste time by doing other things" produced the third highest mean score, at 2.90 on a scale of 1 up to 5, with which 78 participants agreed (47.6%). Then, item 6, "I often find myself performing tasks that I had intended to do days before" produced the highest mean score, at 3.12, with 91 participants (55.5%) agreeing with the statement. Next, item 8, "I generally delay before starting on work I have to do" produced the second highest mean score, at 3.02. 85 participants (51.8%) agreed with the statement.

The Relationship between Learners' Procrastination and Their Attitudes toward Cheating (AtC), Their Absenteeism, and L2 Achievement

The findings on AtC, absences, and L2 achievement among learners are as follows:

First, the mean score of the learner participants' AtC obtained from eight items on AtC was 16.46 on a scale of 1-40, suggesting generally lower AtC or disapproval toward cheating behaviours. Second, the mean score of learners' grades was 78.62 on a scale of 0-100, indicating that they generally had fairly good L2 achievement as measured by their grades. In terms of the total absences in GE classes, the mean score was .79 with the maximum number of absences being six, and the minimum being zero (always present) ($SD = 1.22$), suggesting that learners generally demonstrated diligence in attending the GE classes.

The results of the bivariate correlation formula on the relationship between learners' procrastination and other components - AtC, absenteeism, and L2 achievement, can be seen in Table 3.

As seen in Table 3, learners' academic procrastination positively correlated with learners' AtC and absenteeism, and negatively correlated with learners' L2 achievement. All three associations were statistically significant. The more learners procrastinated, the more favourable attitude toward cheating they had ($r = .41, p < .01$). The more they procrastinated, the higher the number of absences they had ($r = .29, p < .01$). Lastly, the more they procrastinated, the lower their L2 achievement tended to be ($r = -.41, p < .01$).

Table 2*Learners' Academic Procrastination in English Class*

No	Statement	Mean Scores	Standard Deviation (SD)	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)
1.	Related to assignments from English class, I delay making a decision until it is too late.	2.20	.97	0.6	18.3	62.8	18.3
2.	Even after I make a decision related to assignments in English class, I delay acting upon it.	2.17	.93	1.2	15.2	66.5	17.1
3.	I waste a lot of time on trivial matters before getting to the final decisions.	2.75	1.22	4.9	36.6	45.7	12.8
4.	When working on assignments from English class, I often waste time by doing other things.	2.90	1.22	5.5	42.1	41.5	10.9
5.	Even assignments that require little else except sitting down and doing them, I find that they seldom get done for days.	2.32	1.10	2.4	22.0	56.1	19.5
6.	I often find myself performing tasks that I had intended to do days before.	3.12	1.19	7.3	48.2	37.8	6.7
7.	Related to assignments from English class, I am continually saying "I will do it tomorrow or another time".	2.77	1.15	4.3	36.0	51.8	7.9
8.	I generally delay before starting on work I have to do.	3.02	1.20	6.7	45.1	39.6	8.6
9.	I do not get things related to English class done on time.	2.17	1.01	1.2	17.7	59.1	22.0
10.	I am not very good at meeting deadlines in English class.	2.13	1.03	1.2	17.7	54.9	26.2

Table 3*Bivariate Correlation between Learners' Procrastination and Other Components – Learners' AtC, Absenteeism, and L2 Achievement*

		Learners' AtC	Learners' absenteeism	Learners' L2 achievement
Learners' academic procrastination	Pearson Correlation	.405**	.289**	-.407**
	Sig. (2-tailed)	.000	.000	.000
	N	164	164	164

Note. **. Correlation is significant at the 0.01 level (2-tailed).

Furthermore, in order to establish the extent to which learner procrastination impacted their AtC, absenteeism, and L2 achievement, bivariate linear regression formulas were employed with learners' procrastination as the independent variable. Table 4 shows the model summary of the bivariate linear regression results with learners' AtC as the dependent variable.

From Table 4, it can be inferred that academic procrastination impacted 16.4% of the total variance in learner AtC, $R^2 = .16$, $F(1, 162) = 31.88$, $p < .001$. Other variables accounting for the rest 83.6% were outside the formula. Fur-

thermore, academic procrastination significantly predicted learners' AtC, $\beta = .29$, $t = 5.65$, $p < .001$.

Table 5 shows the model summary of the bivariate linear regression results with learner absenteeism as the dependent variable. As seen in Table 5, the study found that academic procrastination could predict 8.3% of learner absences in English classes, $R^2 = .08$, $F(1, 162) = 14.75$, $p < .001$. Furthermore, academic procrastination significantly predicted learners' absenteeism, $\beta = .05$, $t = 3.84$, $p < .001$.

Finally, Table 6 shows model summary of the bivariate linear regression results with learners' L2 achievement as

Table 4*Regression results with learners' AtC as the dependent variable*

Model	R	R Square	Adjusted R Square	Std. E
1	.405 ^a	.164	.159	4.99882

*Note. a. Predictors: (Constant), Learners' procrastination***Table 5***Regression results with learners' absenteeism as the dependent variable*

Model	R	R Square	Adjusted R Square	Std. E
1	.289 ^a	.083	.078	1.174

*Note: a. Predictors: (Constant), Learners' procrastination***Table 6***Regression results with learners' L2 achievement as the dependent variable*

Model	R	R Square	Adjusted R Square	Std. E
1	.407 ^a	.165	.160	16.11405

Note: a. Predictors: (Constant), Learners' procrastination

the dependent variable where it can be seen that learners' academic procrastination could predict 16.5% of their L2 achievement, $R^2 = .17$, $F(1, 162) = 32.09$, $p < .001$. Academic procrastination significantly predicted learner L2 achievement, $\beta = -.92$, $t = -.58$, $p < .001$.

DISCUSSION

Learners' Academic Procrastination in Online English Class

The present study found a moderate level of academic procrastination among learners from non-English majors. This finding was in line with the findings of recent studies (Herdian & Zamal, 2021; Zhang & Zhang, 2022). A moderate level of procrastination was found in a study by Herdian and Zamal (2021) involving 305 Indonesian pre-service teachers from various departments in a general education context and a study by Zhang and Zhang (2022) involving 55 Chinese learners of English. The similarity could indicate that a certain degree of procrastination was prevalent among university learners regardless of subjects and learning contexts. These findings also confirm the reiteration of several authors stating the prevalence of procrastination among learners at the university level (Gonda et al., 2021; Yurtseven & Doğan, 2019).

Furthermore, learners in the present study also reported that they became distracted by other things whilst working on assignments and delayed work they were supposed to do. With the exception of various intrinsic factors such as

level of motivation, this could be attributed to various external factors. In Iran, Mohammadi et al. (2015) found a moderate positive correlation between use of the internet by learners and academic procrastination, suggesting that the internet could be a factor distracting learners from working on their tasks promptly. In the online learning context of the present study where learning was highly dependent on the use of the internet, learners may have been tired of using the internet for educational purposes all the time. As such, the temptation to use it for entertainment, for example accessing social media and entertaining posts, may occur. A study involving school learners by Wulandari et al. (2021) also reported procrastination among learners was quite widespread during Covid-19-driven online learning. Besides this, the limited interaction between teachers and learners during online learning may exacerbate the situation, since low-achieving learners may be falling behind their peers with limited opportunities to ask for help from teachers and peers. In turn, they decided to procrastinate due to task aversiveness (Steel, 2007).

The Relationship between Learners' Procrastination and Their Attitudes toward Cheating (AtC), Their Absenteeism, and L2 Achievement

The study found that academic procrastination among learners could predict 16.4% of their AtC with a statistically significant, moderate and positive association between the two variables. This finding was different from a finding of a study by Oktaria et al. (2021) at a medical faculty where they found no association between the two variables. The finding

was in line with a finding of a study in Iran by Saracaloğlu et al. (2021) involving 357 learners from both graduate and undergraduate levels at various departments. They reported that academic procrastination among learners correlated positively and moderately with their AtC. The similarity between the finding of the present study conducted in an L2 context and that of a study by Saracaloğlu et al. (2021) conducted outside the L2 context may give an early picture of the direction of interaction between academic procrastination and AtC. Intuitively speaking, procrastinating learners may find themselves with limited time left to complete tasks because they delay working on the tasks until much later. In such situations, they may be tempted to take cognitive shortcuts such as cheating, in order not to miss the deadline. Needless to say, however, more empirical studies in L2 learning contexts are needed to establish the interactions between the two variables in the field of L2 learning.

Furthermore, it was found that academic procrastination could predict 8.3% of absences with a statistically significant, weak and positive association between the two variables. When learners procrastinated due to certain reasons, their understanding of materials may not be optimal. This can lead to avoidance behaviours such as skipping classes due to a fear of unpleasant experiences. Procrastination may thus lead to negative feelings toward the class eventually leading to absences. The finding of this study could provide an early empirical 'picture' of the interaction between academic procrastination and learner absences in L2 classes. This finding takes into account the rarity of such studies in the literature, let alone L2 literature despite absenteeism having been a frequently reported issue in studies in various English as L2 learning contexts (Al-Mekhlafi, 2016; Nizar & Flah, 2014; Subekti, 2020).

Moreover, the study also found that academic procrastination could predict 16.5% of learner L2 achievement with a statistically significant, moderate, and negative association between the two variables. This finding conformed with the findings of several previous studies suggesting the negative association between the two variables albeit to different degrees (Akpur, 2017; Aydoğan & Akbarov, 2018; Kafipour & Jafari, 2021; Korkmaz et al., 2018; Yurtseven & Akpur, 2018; Zhang & Zhang, 2022). Kafipour and Jafari (2021), for example, found that learner procrastination could predict a staggering 90.8% of the total variance in L2 writing achievement, whilst two studies in Turkey found a weak to moderate association between procrastination and L2 achievement (Akpur, 2017; Yurtseven & Akpur, 2018). These varieties may be attributed to the nature of the assessment comprising L2 achievement. In the present study and the two studies in Turkey (Akpur, 2017; Yurtseven & Akpur, 2018), the L2 achievement variable was comprised of various types of language assessments. In comparison, the achievement variable in the study by Kafipour and Jafari (2021) was specific in L2 writing. In addition, in the present study, the level of in-

terest among participants in the English class and their level of motivation in joining such non-credited, yet mandatory, GE classes in the present study may explain why their procrastination could to a certain degree negatively affect their L2 achievement.

Despite the findings and possible contributions of the present study, limitations should be acknowledged. The first and foremost limitation is the nature of the self-report questionnaire. In this study it means that the quantitative findings were solely based on the honesty (and possibly dishonesty) of participants in responding to the questionnaire items. Second, this quantitative study did not account for gender differences as a possible contributing factor in the equations. Hence, the results may be seen with gender differences as a possible confounding factor. Furthermore, previous studies on the association between procrastination and AtC in the L2 learning context and procrastination and absenteeism seem to be very limited. Hence, the comparison between the finding of the present study and those of the previous ones were limited. As a result, the findings on both procrastination/AtC and procrastination/absenteeism interactions should be interpreted with caution and may warrant further investigations involving different participants in different L2 learning contexts. This may especially be the case since the sample of this study was generally quite limited, both in number and in breadth and diversity.

CONCLUSION

This study found that academic procrastination among Indonesian L2 learners was generally at a moderate level. It also found statistically significant positive relationships between academic procrastination and two components, learner AtC and absenteeism. In comparison, academic procrastination negatively correlated with learner L2 achievement. Their academic procrastination could predict 16.4%, 8.3%, and 16.5% of the total variance in their AtC, absenteeism, and L2 achievement respectively.

Considering the positive relationships between procrastination and the two components – AtC and absenteeism, teachers could condition instructional design in such a way as to discourage procrastination, cheating, and absenteeism at the same time. Teachers can employ project-based tasks in groups completed during several consecutive meetings. During these meetings, learners consult their progress where submission of progress is also graded. In this way, learners can be more easily assisted, if they have difficulty working on tasks and they are also encouraged to make step-by-step progress. Promoting more group work may also reduce the chance of procrastination, since learners need to coordinate with their group members to work on the task otherwise the quality of the work may not be satisfactory.

Furthermore, this study contributes to establishing the relationship between academic procrastination and three components: AtC, absenteeism, and L2 achievement. In terms of the procrastination/AtC and procrastination/absenteeism relationships, specifically, this study may open the way for further studies in the L2 context considering the infrequency of such studies in L2 literature. However, considering this rarity, the findings should be interpreted with caution, and be treated as an exploration to possibly warrant further investigations.

Future researchers may be interested in conducting a survey involving a bigger sample and employing a stepwise regression, in order to investigate the predictive power of factors such as procrastination, AtC, and absenteeism toward

L2 achievement. Conducting studies focusing on the efforts of teachers in reducing procrastination among learners in L2 classes should be encouraged. Whilst it is realised that young adult learners at the university level are responsible for their own learning, there is much that teachers can do to mitigate situations where procrastination is widespread and negatively affects learning.

DECLARATION OF COMPETING INTEREST

None declared.

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