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# Factors Affecting Student Compliance in Asynchronous Classes of the Grade 11 Students

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## ABSTRACT

Students' compliance has long been a recurring problem for educators in the academe. In Online Distance Learning, compliance-based activities are the main output teachers generate students' grades from. Hence, students' submissions during synchronous and asynchronous sessions are highly expected. This study aimed to ascertain the factors affecting Student Compliance, and the student's commitment to submit tasks and outputs within the given time, as required in a course, in Asynchronous Classes of the Grade 11 Students of DLSZ-Vermosa. Eighty-six students and three English teachers were respondents to this mixed-methods research. Qualitative data collected from open-ended questions and

focus group discussions among teachers and students were coded into categories thematically. Students' performance in terms of compliance was measured through documentary analysis of the recorded number of output submissions via Google Classroom and Google Spreadsheet record, respectively. Factors affecting student compliance were determined through a researchers-constructed 5-point Likert scale questionnaire. Results revealed that Personal Constraints, Resource Constraints, and LMS/Instruction constraints do not significantly affect the students' compliance in asynchronous classes. Among the four factors, only the environment or physiological constraints significantly influence the students' compliance in asynchronous classes. Thus, the extent of the effect of the environment or physiological constraints is moderate to students' compliance in asynchronous classes.

***Keywords*** **—** Education, online distance learning, asynchronous class, grade 11 students, students' compliance, reading and writing, mixed-methods, Philippines

## INTRODUCTION

Online instructions, like traditional education settings, require proactive learning and self-discipline on the learners' part to construct meaning and acquire competencies (Cavanaugh et al., 2012). Proactive learning and self-discipline manifest in the student's compliance or commitment to submit tasks and outputs within the given time, as required in a course. A study conducted by Gregory and Morón-García (2009) investigated how students approach their tasks, how their time management improves as they acquire more experience and more understanding, and whether an electronic submission has any effect on the way they manage their tasks and requirements for submissions depending on the length of time allowed to complete a certain task.

In another study conducted by You (2015), the impact of academic procrastination on e-learning course achievement was investigated. Findings from his study noted that since all of the interactions were automatically recorded in a learning management system (LMS), procrastination, such as the delays in weekly scheduled learning and late submission of assignments, could be identified from log data from students, instructors, and contents in an e-learning environment. Conversely, several factors, such as the absence of inspiration, the absence of logical help techniques, and innovative obstacles, can be considered

for the high disintegration rates in online learning environments (Broadbent & Poon, 2015; Chen & Jang, 2010; Smith & Ayers, 2006).

A study conducted by Cosmas and Mbwette (2009) highlighted ICT as a key factor in the efficacy of ODL. The findings in the study strengthened that in the advanced computerized world, utilization of ICT in ICT in ODL is indispensable. Similarly, Internet-related factors, such as speed, bandwidth, and reliability, have been defining factors reported whenever a student misses or submits a late output.

As cited by Akram et al. (2019), learners report that they face difficulties while they are learning through online LMS because of different components, e.g., LMS requires more effort on the part of the learners, learning through LMS is self-guided and self-directed, and staying up with the quick learning through LMS is hard for some learners. Most of the learners could not effectively adjust to education through online LMS. Similarly, Garland (2007, as cited in Musingafi et al., 2015) identified other challenges for learners' persistence in ODL, which include a learning environment that is not conducive to learning and insufficient time for learners to accomplish given tasks. Moreover, students experienced that some tasks require additional time because of the extent of the task and their situation at home, such as in the case of the current ODL, where students do school at home.

Several studies on ODL mentioned that despite its expanding growth and advantages, students enlisted in the ODL setup reported having experienced individual, institutional, and instructional challenges, according to Musingafi et al. (2015).

Moreover, school administrators noted that students repeatedly submit late course requirements and continually appeal for extensions of deadlines (Nortey & Bodjawah, 2015.) Thus, they are regularly bombarded with requests and complaints for which there are no general solutions, such as the extension of deadlines and grade considerations which defy their moral predicaments, where the once uncommon became the norm (Dukewich & Wood, 2016). Thus, there is very little in the pedagogical approaches, and there are punitive policies that address these everyday dilemmas that educators face in their work performance. Furthermore, little literature has explored the factors affecting student submission since the transition to online distance learning was mainly precipitated by the COVID-19 pandemic. For these reasons, this study was carried out to determine the factors affecting student compliance among Senior High School students in asynchronous platforms, thereby proposing an intervention program for poorly complying with the subject.

## OBJECTIVES OF THE STUDY

This study aimed to determine the factors affecting student compliance in asynchronous classes among the eighty-six (86) Grade 11 students enrolled in De La Salle Santiago Zobel Campus for 2020-2021. Specifically, the study aimed to (1) determine the types of activities given in asynchronous classes, (2) determine the student's performance in terms of compliance and non-compliance in asynchronous classes, (3) identify the extent to the following factors affect students' submission, (a) Personal Constraints, (b) Resource Constraints, (c) LMS/Instructions Constraints, and (d) Environmental/Physiological Constraints.

## METHODOLOGY

### Research Design

The study used a mixed-method research design to determine students' compliance in asynchronous classes. Creswell and Clark (2017) define mixed-methods research as those studies that include at least one quantitative and one qualitative strand. They also cited that in a mixed-methods study, researchers typically delineate research questions that pertain specifically to quantitative data analysis and ones that pertain specifically to qualitative data analysis. Hence, making probable the addition of research questions that the combination of the interpretations of both kinds of analysis can answer.

Similarly, the types of activities given during asynchronous classes were determined through an FGD- transcript of the interview among the Grade 11 English teachers and students; students' compliance was measured through a descriptive analysis of the recorded number of output submissions via Google Classroom and factors affecting student compliance was determined through a 5-point Likert scale survey questionnaire designed by the researchers themselves for this study.

### Participants

Three Grade 11 sections from De La Salle Santiago Zobel- Vermosa Campus in the Academic Year 2020-2021 were selected as respondents of this study using purposive sampling. Out of 108, 86 students participated in the study. In addition, three Grade 11 Senior High School English teachers who had been teaching in the institution for at least three academic years were also selected to participate in the study by answering focus group discussion questions. For

students, the criteria for respondent selection are as follows: they should be grade 11 students officially enrolled in DLSZ in A. Y. 2020-2021 and have completed a term of the academic year. Teachers should be presently handling English subjects in grade 11 and teaching the same subject for at least two academic years.

Table 1
*Distribution of Sample Size*

| Respondents | Population | Sample | Percentage |
|---|---|---|---|
| Grade 11-Section 1 | 37 | 32 | 36% |
| Grade 11-Section 2 | 37 | 29 | 33% |
| Grade 11-Section 3 | 34 | 25 | 28% |
| English Teachers | 3 | 3 | 3% |
| Total | 111 | 89 | 100% |

**Data Collection Procedure**

After identifying the key research objectives of the study, a list of questions was prepared for focus group discussions. Ethics clearance from the research locale was sought, and consent forms from the respondents were also secured. Group A, consisting of three (3) Grade 11 English teachers, was identified; Group B, consisting of ten (10) students, was also selected. Afterwards, a semi-structured Focus Group Discussion (FGD) among teachers and students was conducted. The teachers were interviewed about the types of activities given during asynchronous sessions and asked about the nature of the activities given. Students were interviewed about how they describe the activities given by their teacher during asynchronous sessions and then asked to explain why they sometimes fail to submit their activity, corresponding to the factors that affect their compliance during asynchronous activities. Interview transcripts and notes were analyzed using a thematic analysis approach. A descriptive analysis of the student's grades generated via Google Classroom submissions and the spreadsheet of the students' responses via Google Forms was also performed to determine students' compliance.

Moreover, the researchers-constructed 5-point Likert Scale Questionnaires were formulated and classified according to the FGD transcript of the respondents' responses and the results of the review of related literature to gauge the factors affecting students' compliance during asynchronous sessions. The survey, in Google Forms, was administered synchronously using the Google

Meet platform. After explaining the nature of the study, students were tasked to tick the column/number of the criteria corresponding to the factors affecting their output submission during asynchronous sessions. The survey aimed to determine the factors affecting students' compliance of the students enlisted as Criteria 1: Personal Constraints, Criteria 2: Resource Constraints, Criteria 3: LMS/ Instructions Constraints, and Criteria 4: Environmental/Physiological Constraints. Students ticked the column of a Likert scale that corresponds from 1 to never, 2 to occasionally, 3 to sometimes, 4 to often, and 5 to always, pertain to how frequent or infrequent the students experienced the student compliance-related factors. The descriptive equivalent of the criteria is presented in Table 2. The instrument utilized consisted of 20 conditions relating to the factors affecting the compliance of students. Each criterion, such as personal, resource, LMS/instructions, and environmental/physiological constraints, consists of four (4) subsets that the students need to select from.

Table 2
*Descriptive Equivalents of the Research Instrument*

| Scale | Description | Descriptive Equivalent |
|---|---|---|
| 5 | Always | Experienced Every Asynchronous Session |
| 4 | Frequent | Experienced 2 Times a Week |
| 3 | Occasional | Experienced Once a Week |
| 2 | Rarely | Experienced Once a Month |
| 1 | Never | Not Evident/<br>Not Experienced At All |

**Tool Validation and Reliability**

The main instrument was reviewed and approved by one of the panels of reviewers for pilot administration. Accordingly, the researcher administered the pilot test among ten (10) students. The pilot test results were subjected to Cronbach alpha. Taber (2017) defines Cronbach's alpha as a statistic commonly quoted by authors to demonstrate that tests and scales constructed or adapted for research projects fit the purpose. Cronbach alpha is the most common measure of internal consistency or reliability; thus, it is a determiner of the tool designed by the researcher to accurately measure the variable of interest (Tavakol & Dennick, 2011). For this study, Cronbach's alpha on Personal Constraints is 0.829, and Resource Constraints correspond to Cronbach's alpha of 0.813;

LMS/ Instructions Constraints resulted in Cronbach's alpha of 0.829, equivalent to good. Environmental/Physiological Constraints resulted in Cronbach's alpha of 0.735, equivalent to acceptable. The overall tool reliability is 0.8020, which indicates a high level of consistency for the scale used by the researcher that yielded consistent results corresponding to the responses measured.

Table 3
*Reliability of the Research Instrument using Cronbach's Alpha*

| Student Compliance-Related Factors | Cronbach α | Type/Quality of Factors |
|---|---|---|
| Personal Constraints | 0.829 | Good |
| Resource Constraints | 0.813 | Good |
| LMS/ Instructions Constraints | 0.829 | Good |
| Environmental/Physiological Constraints | 0.735 | Acceptable |
| Overall Tool Reliability= 0.802 (Good) | | |

**Data Treatment and Analysis**

In checking the result, the researchers employed the following instruments.

To determine the types of activities given to the Grade 11 students, FGD transcripts from teachers and students were coded into a set of categories thematically.

To determine students' performance in terms of compliance during asynchronous sessions, a descriptive analysis of the student's grades generated from Google Classroom and Google Forms was performed.

Mean and Standard Deviation were initially used to determine the factors affecting student compliance during asynchronous sessions. Linear Regression was also employed with the aid of IBM SPSS version 24. One of the most popular methods for multi-factor data analysis is regressions, a statistical tool for examining and modeling the relationship between variables (Montgomery et al., 2012). Accordingly, the main goal of many investigations is to identify the underlying factors contributing to this study's notable phenomena.

## RESULTS AND DISCUSSION

Four themes emerged from the FGD transcripts of the respondents, which generally characterize the activities given during asynchronous sessions. These are

(1) formative tasks, (2) short-term progress tests, (3) exit tickets, and (4) final exit tickets. Based on the teachers' responses to the activities given by Reading and Writing teachers, activities were categorized as Formative Tasks or Short-Term Progress Tests, which consist mainly of Reading Comprehension activities, Speed Reading Tests, and Writing activities. Accordingly, they defined formative tasks as collective evidence of learning which happens periodically. As mentioned by Andriotis (2017), flipped courses allow students to watch lectures and other educational content on their schedules using asynchronous self-study content, video-on-demand, or other similar methods. Students are given additional resources to provide a more comprehensive understanding of the subject (Strayer, 2012). Subsequently, a flipped homeroom approach expects to give students a chance to be engaged in the learning interaction as they work on an inquiry or output intended to aid them with an understanding of a topic (Andrews et al., 2011, as cited in Limniou et al., 2018).

Students, on the other hand, responded that asynchronous activities given by teachers are called either an exit ticket, a short activity, whether in a multiple-choice format, a tick list or a short answer text, or a final exit ticket: a self-assessment checklist of their progress or understanding of a lesson. Instead of formative assessments as classified by the teachers, students emphasized that their teacher reiterated that activities were designed to be finished in less than thirty minutes. Exit tickets offer easy, quick, and informative assessments that help encourage students to interpret, reflect on the content, and establish connections for future learning (Marzano, 2012; Owen & Sarles, 2012). Similarly, exit tickets provide teachers with the information to analyze students' thoughts and discuss their misconceptions about certain topics (Brookhart, 2013). Thus, according to teachers, short progress tests allow feedback and discussion of results to take only five-ten minutes per week during synchronous sessions since their schedule is only thirty minutes per subject per class.

Table 4 presents the students' compliance assessed through the Google Classroom grades about students' submission of outputs. For Grade 11- Section 1, out of the thirty-two (32) respondents, twenty-two (22) have consistently turned in their activities; the remaining ten (10) students have records of not turning in their papers. For Grade 11- Section 2, seventeen (17) students turned in their activities; fifteen (15) failed to turn in their activities. For Grade 11- Section 3, out of the twenty-five (25) respondents, nineteen (19) turned in their activities, while 6 failed to turn in their activities. All in all, out of the eighty (86) respondents, fifty-eight (58) students submitted their asynchronous activities;

twenty-eight (28) students failed to submit asynchronous activities. In addition, only 67% of students from the three sections complied with the asynchronous activities, while the remaining 33% could not comply with the activities.

Table 4
*Students' Compliance with Online Platforms*

| Grade/Section | Students/ Class | No. of Asynchronous Activities | No. of Students who complied | No. of Students who did not comply | Percentage of Student Compliance |
|---|---|---|---|---|---|
| Grade 11- Section 1 | 32 | 15 | 22 | 10 | 69% |
| Grade 11- Section 2 | 29 | 15 | 17 | 12 | 59% |
| Grade 11- Section 3 | 25 | 15 | 19 | 6 | 76% |
| Total | 86 | 45 | 58 | 28 | 67% |

Shown in Table 4.2 are the factors affecting student compliance. Each criterion has five (5) subsets, respectively. For personal constraints, **academic procrastination**/failure to prioritize is occasionally experienced by the students. The overall results of the study by Naturil-Alfonso et al. (2018) also showed no differences in procrastination or in assignments mean grades between the two groups they utilized as respondents. They also cited the study conducted by Essau et al. (2008), which showed that high levels of procrastination make students unable to regulate and organize their academic goals.

**Doubts whether the paper is turned in/forgot to turn in,** as a subset, is also rated by the students as occasionally experienced, with an overall weighted mean of 2.78, respectively.

**Difficulty in managing time** due to workload, training, clubs, and organizations is occasionally experienced by the students, as reflected by their overall weighted mean, which was 3.17: the highest rating for the subsets on personal constraints.

For Resource Constraints, **intermittent Internet connectivity** is occasionally experienced by the students, as reflected by their overall weighted mean of 3.09, the highest rating. Findings parallel to the study by Adnan and Anwar (2020), where more than half of the students reported the "availability/strength of the signal as the major difficulty causing limited internet access." However, **insufficient knowledge of the topic/content** is the highest rating, with an overall weighted mean of 2.02. For Environmental/Physiological Constraints,

students rated distractions as occasionally experienced, with a weighted mean of 2.78, respectively.

Table 5
*Factors Affecting Student Compliance*

| Criteria | Mean | SD | Interpretation |
|---|---|---|---|
| Personal Constraints | | | |
| PC1: Lingering Illness | 1.80 | 0.97 | Rarely |
| PC2: Lack of required skill for the task | 2.12 | 0.91 | Rarely |
| PC3: difficulty in managing time/too many workload/trainings/clubs and organizations | 3.17 | 1.29 | Occasionally |
| PC4: Academic procrastination/failure to prioritize | 2.57 | 1.18 | Occasionally |
| PC5: doubts whether the paper is turned in/ forgot to turn in | 2.78 | 1.34 | Occasionally |
| Resource Constraints | | | |
| RC1: power outage | 2.03 | 1.08 | Rarely |
| RC2: intermittent Internet connectivity | 3.09 | 1.10 | Occasionally |
| RC3: webpage down | 2.26 | 1.17 | Rarely |
| RC4: low-tech or obsolescent gadget | 1.69 | 1.07 | Rarely |
| RC5: Shared resources/gadgets | 1.55 | 1.04 | Rarely |
| LMS/ Instructions Constraints | | | |
| LIC1: Incomplete/unclear instructions | 1.95 | 1.05 | Rarely |
| LCI2: Insufficient knowledge of the activity | 1.95 | 0.98 | Rarely |
| LCI3: Insufficient knowledge of the topic/ content | 2.02 | 0.98 | Rarely |
| LCI4: Insufficient knowledge about the format of the output | 1.93 | 1.04 | Rarely |
| LCI5: Insufficient knowledge about the feature/s of the platform/LMS | 1.86 | 1.05 | Rarely |
| Environmental/Physiological Constraints | | | |
| EPC1: noise | 2.41 | 1.29 | Rarely |
| EPC2: External distractions | 2.78 | 1.24 | Occasionally |
| EPC3: Room temperature | 2.00 | 1.16 | Rarely |
| EPC4: Home conditions/responsibilities | 2.33 | 1.31 | Rarely |
| EPC5: Shared work/study-space | 1.98 | 1.38 | Rarely |

Multiple Linear Regression was utilized to determine which factors (personal constraints, resource constraints, LMS/Instruction constraints, and Environmental/psychological constraints) predict the students' compliance

in asynchronous classes. Eighty-six valid cases were utilized in the study. The presence of multicollinearity was assessed to determine if three or more independent variables (personal constraints, resource constraints, LMS/ Instruction constraints, and Environmental/psychological constraints) are related. Multicollinearity is a problem because a high level of multicollinearity reduces the unique variance explained by each independent variable (-value); thus, it is difficult to ascertain the effect of each independent variable (Yoo et al., 2014). In this study, the collinearity statistics are presented in Table 6, and it was shown that no VIF is greater than 4, and the no tolerance value is below 0.10. This means no multicollinearity issue exists (Hair et al., 2006).

Table 6
*Model Summary*[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .323[a] | .104 | .060 | 12.85867 | .104 | 2.360 | 4 | 81 | .060 | 1.755 |

*a. Predictors: (Constant), Env_Psy, PersonalConstraints, LMS_Instructions, Resource Constraints*
*b. Dependent Variable: Compliance*

Table 6 shows that the data met the assumption of independent errors (Durbin-Watson value = 1.708). However, the model shows a very low prediction level of the student's compliance in asynchronous classes as described by the adjusted R square, R = 0.060 (Cohen, 1988). Thus, the four-predictor model accounted for 6% of the variance in the students' compliance in asynchronous classes, F (4, 81) = 2.360, $p < 0.05$, R2 = 0.06.

Table 7
*Correlations*

| | PC | RC | LMS | E |
|---|---|---|---|---|
| Compliance | 0.095 | 0.159 | 0.013 | 0.293 |

*The correlation is significant at a 0.05 level of significance.*

Table 7 shows a low correlation between the students' compliance in asynchronous classes and Resource Constraints (*r = 0.159*) and Environment/ Psychological Constraints (*r = 0.293*). At the same time, there is a very low

correlation between LMS or Instructions Constraints (*r = 0.013)* and Personal Constraints (*r = 0.095*).

Table 8
*Coefficients*[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | | | Zero-order | Partial | Part | Tolerance | VIF | |
| 1 | (Constant) | 84.277 | 5.120 | | 16.460 | .000 | | | | | |
| | PC | .976 | 2.257 | .058 | .433 | .666 | .095 | .048 | .045 | .620 | 1.613 |
| | RC | .402 | 2.263 | .025 | .178 | .860 | .159 | .020 | .019 | .576 | 1.736 |
| | LMS | -2.548 | 2.017 | -.177 | -1.263 | .210 | .013 | -.139 | -.133 | .565 | 1.768 |
| | E | 4.431 | 1.802 | .332 | 2.459 | .016 | .293 | .264 | .259 | .607 | 1.649 |

a. Dependent Variable: Compliance

Table 8 shows that Personal Constraints (p = 0.666), Resource Constraints (p = .860), and LMS/Instructions constraints (p = 0.210) do not significantly affect the students' compliance in asynchronous classes, p > 0.05. Among the four factors, only the environment or psychological constraints significantly influence the students' compliance in asynchronous classes (p < 0.05). The extent of the effect of environmental or psychological constraints is moderate to students' compliance in asynchronous classes (Cohen, 1988).

## CONCLUSION

The types of activities given by Reading and Writing teachers were categorized by the teachers as Formative Tasks, which consist mainly of Reading Comprehension, Speed Reading Tests, and writing activities. Similarly, teachers also coined them as Short-Term Progress Tests since the activities were designed to be finished in less than thirty minutes. On the other hand, students categorized the activities as exit tickets and final exit tickets. The difference in the themes

given by the teachers and the students can be attributed to how the teachers label their activities for asynchronous sessions.

Generally, the average Students Compliance in Online Platforms is at an acceptable level of 67%. However, it is important to note that Grade 11-Section 2 is alarming, with only 57% of recorded students' compliance. Results revealed that Personal Constraints, Resource Constraints, and LMS/Instruction constraints do not significantly affect the students' compliance in asynchronous classes. Among the four factors, only the environment or psychological constraints significantly influence the students' compliance in asynchronous classes. Thus, the extent of the effect of environmental or psychological constraints is moderate to students' compliance in asynchronous classes.

## TRANSLATIONAL RESEARCH

The findings of this study may be useful in strengthening the pedagogical approaches and formulation of policies that address student compliance. Furthermore, continued utilization of short progress tests, submission flexibility, and regular giving of feedback is highly recommended.

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