Examining Factors Relating to Classroom Attendance and Performance

Peter Tze-Ming Chou
Wenzao Ursuline College of Languages, Kaohsiung, Taiwan

Ya-Hui Kuo
Wenzao Ursuline College of Languages, Kaohsiung, Taiwan

Received: March 28, 2011       Accepted: April 22, 2012       Published: May 1, 2012
doi:10.5296/jse.v2i2.1564       URL: http://dx.doi.org/10.5296/jse.v2i2.1564

Abstract
This study examined the relationship between four class attitudinal variables and how it correlates to class attendance and performance. A questionnaire was administered to 134 undergraduate students at a medium sized college in Taiwan. The data included questions about the participant’s rating of the level of difficulty of the course (Difficulty), the topics covered in the course (Topics), their motivation towards attending the course (Motivation), and whether or not the participants felt that the course is practical and useful to their future (Practicality). The results of the Pearson correlation coefficients showed that 4 out of the 15 correlations were statistically significant. These included the negative correlation found between motivation and topics; and practicality and topics. The finding that none of the variables were significantly correlated to course attendance and course performance suggests that the strongest predictor of success of a course was based on the student’s level of attendance. This was in accordance with the literature review. The discussion in the conclusion provided some pedagogical implications for what teachers can do in their classrooms to increase class attendance.

Keywords: Academic performance, Attitudes, Class attendance, Student motivation and Taiwan.
1. Introduction

Student motivation is an important factor in learning. When students are motivated, they will have a strong desire to learn and keep learning. There are two common sources of motivation which are commonly known as extrinsic motivation and intrinsic motivation. Extrinsic motivation refers to motivation which comes from sources outside of the individual such as the need to pass an exam or financial rewards. In contrast, intrinsic motivation refers to motivation which comes from within the individual such as the enjoyment of learning or the student’s own perception of their own success or failure (Harmer, 2001; 2007). Although both intrinsic and extrinsic motivations may explain why students come to class, it is only one of the many factors affecting course performance and learning. Other factors may include attendance rate, course difficulty, interest in the topics covered in class and how practical the students think the course is to them in the future. These factors can be analyzed to see how they correlate to student’s performance and give teachers pedagogical implications on ways to maximize learning.

2. Literature Review

The common stereotype of Asian students is that they are trained to memorize and imitate rather than being analytical and develop a viewpoint of their own. In the classroom, they are often viewed as silent, passive, non-participatory and surface learners. This idea has been widely discussed in the literature in the past years (Bradley & Bradley, 1984; Samuelowicz, 1987). Although many Western teachers may view this stereotype as a drawback in learning, this stereotype of Asian students has been strongly challenged in more recent research (Park, 2000; Ramburuth & McCormick, 2001; Volet & Renshaw, 1996). In the Australian study by Volet and Renshaw (1996), it was found that International students were able to meet the requirements of their courses and maintain a high-achievement throughout their academic study abroad. In a more recent study, Sayers and Franklin (2008) conducted a study using reflective techniques and found common trends that most Chinese students believe hard work (and personal motivation) is crucial to the learning process. Chinese students also value and take pride in hands-on, practical experience in learning. Sayers and Franklin (2008) also found that Chinese students see social network as being crucial to their learning outcomes. For example, many reported discussing assignments with classmates and asked for advice on how to work on the assignments. This was similar to the findings in Ramburuth and McCormick’s (2001) research that Asian students have a preference for collaborative learning. The examples above show that Asian students generally have a positive learning attitude and this has a positive effect on their course performance, however; other factors such as course attendance are also a strong indicator of course performance.

Course attendance is an important part of learning and many studies have confirmed a correlation between class attendance and academic performance, having generally found that a student’s class attendance has a positive effect on exam performance. This was true in cases of economics class (Chen & Lin, 2008; Cohn & Johnson, 2006; Lin & Chen, 2006) as well as in psychology class (Thatcher, et al., 2007; Wigley, 2009). In one study, it was found that students who attended the lectures scored 9.4% to 18% better on exams than students who did
not attend every lecture (Chen & Lin, 2008). Numerous studies have examined ways to increase attendance. In one study, Brooks (2008) tested the use of financial incentives to increase attendance in adult literacy classes and to improve learners’ attainment. The result showed that the financial incentives had no effect on attainment because the external intervention is perceived as controlling which reduced their intrinsic motivation in the activity. What seems to work in increasing student attendance is the use of a graded attendance policy. Chenneville and Jordan (2008) found that the use of graded attendance policies in undergraduate college courses increased class attendance. Such policy is a form of external motivator because the fewer times a student misses a class, the higher his or her grades will be. In contrast, Moore (2005) found that penalties for excessive absenteeism did not improve class attendance since students who fail because of attendance-related penalties would have failed regardless of the penalty. The reasons why students come to class is also an interesting area to explore in this topic. Friedman, et al. (2001) found the reasons why students miss classes include interest in the subject matter, class size and whether or not the class was taught by the professor. Teachers in elective courses saw higher attendance rates than teachers of required courses because students have more intrinsic motivation for attending the courses that they wanted to take. More students also tend to miss large classes because their attendance is not noticed, necessary, or consequential.

The review of literature suggested that Asian students generally have a positive learning attitude that allows them to perform well in different academic settings. A good learning attitude also includes attending the classes regularly and studies have found a positive correlation between class attendance and course performance. However, how other variables correlate to course performance have not been tested such as the perceived level of difficulty (Difficulty), interests in the topics (Topics), motivation for attendance (Motivation) and how practical and useful the students think the course is to their future (Practicality). There are two research questions that this study will examine:

1. Are there any significant relationships between the variables Difficulty, Topics, Motivation and Practicality?

2. How do the variables Difficulty, Topics, Motivation and Practicality correlate to course attendance and performance?

3. Methods

A. Participants

The sample of the study comprised of 134 students from a medium sized college in Southern Taiwan. Both male (27%, n=36) and female (73%, n=98) students were used as the participants in the study. The majority of the participants were from the English department (75%, n=100) while non-English majors consisted of 25% (n=34). The participants were students who enrolled in an elective course called Introduction to English Teaching Methodology. The course met two hours per week during the fall semester. There were a total of eighteen weeks in the semester. Data was used from two sessions of the day-division and one session of the night-division. The breakdown for which year of study the students were
from was 33% in the first year \((n=44)\), 19% in the second year \((n=26)\), 39% in the third year \((n=52)\), and 9% in the fourth year \((n=12)\).

**B. Attendance and Grading**

The course Introduction to English Teaching Methodology was taught by the same instructor in both the day-division and the night-division sections. Attendance is mandatory as part of the school’s policy and class attendance was recorded at every class period. Whenever a student misses a class, they must follow the proper procedure to properly ask for leave. Failure to do so will result in an unexcused absence. However, in this study, class attendance was not considered into the final grades and students were not penalized for absences. Because the course was taught by the same instructor, all the material presented both in class and in assigned readings was the same for all sections. Students also had the same number of assignments and exams throughout the course. Course grades used for this study were based on students’ abilities to demonstrate their mastery of the content in the assignments and exams.

**C. Students’ Expectations and Attitudes**

Students’ expectations and attitudes about class attendance were obtained by administering a written survey at the end of the final day of class. This was administered one week before the final exam. The students were informed that the survey was for a research on class attendance and completion of the survey was voluntary. The participants had approximately twenty minutes to complete the survey and they were allowed to leave the classroom after they turned in the survey.

The survey used for this study consisted of ten questions. The first three questions elicited demographic information on the students’ year in school, whether or not they are English majors, and the sex of the participants. Questions 4 to 7 were the main focus of the survey which asked the students’ attitudes towards the four attitudinal variables (Difficulty, Topics, Motivation, and Practicality) in the study. All of the questions on the attitudinal variables used a 5-point likert-scale. Questions 8 to 10 elicited information that could be used to provide additional information about the attitudes of the participants. These include how much time they typically spend preparing for the course; how often they were late for the class, and how many times have they missed the class. These questions were based on a 4-point likert-scale. The higher the rating in the likert-scale, the higher the frequency (see Appendix 1).

**D. Data Analysis**

The main analysis used for this study was the Pearson Correlation Coefficients. The data used from the survey included questions about the participant’s rating of the level of difficulty of the course (Difficulty), the topics covered in the course (Topics), their motivation towards attending the course (Motivation), and whether or not the participants felt that the course is practical and useful to their future (Practicality). A high rating in the variable Difficulty indicates that the respondents feel that the course is too difficult to understand. A high rating in the variable Topics indicates that the respondents feel that the topics covered in the course
are very interesting. A high rating in the variable Motivation indicates that the respondents are very motivated to come to class. Finally, a high rating in the variable Practicality indicates that the respondents feel that the course is practical and useful to them in the future. The participants’ final grade and attendance for the course was also included in the analysis.

4. Results

The Pearson Correlation Coefficients was used to determine how different variables correlate to class attendance and class performance. The mean score for each of the variables in the study is summarized in Table 1. From the result, the participants had a mean final grade score of 75.89 ($SD = 10.62$) and a mean attendance rate of 95.76% ($SD = 6.14$). Most participants found the level of difficulty of the course to be about right ($M = 3.16$, $SD = 0.52$) and they have a little bit above average motivation to come to class ($M = 3.43$, $SD = 0.73$). It was interesting to note that the participants found the topics covered in class to be a little boring ($M = 2.75$, $SD = 0.61$) yet they felt that the course to be somewhat useful and practical in the future ($M=3.77$, $SD = 0.90$).

Table 1. Summary of means and standard deviations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>75.89</td>
<td>10.618</td>
<td>134</td>
</tr>
<tr>
<td>Attendance</td>
<td>95.76</td>
<td>6.140</td>
<td>134</td>
</tr>
<tr>
<td>Difficulty</td>
<td>3.16</td>
<td>.518</td>
<td>134</td>
</tr>
<tr>
<td>Topics</td>
<td>2.75</td>
<td>.606</td>
<td>134</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.43</td>
<td>.730</td>
<td>134</td>
</tr>
<tr>
<td>Practicality</td>
<td>3.77</td>
<td>.900</td>
<td>134</td>
</tr>
</tbody>
</table>

Pearson correlation coefficients were computed among the six variables. The results of the Pearson correlation coefficients are shown in Table 2. Using the Bonferroni approach to control for Type I error, a $p$ values less than .003 (05/15=.003) was required for significance. The results of the analyses show that 4 out of the 15 correlations were statistically significant. The correlation between final score and class attendance was significant, $r(132) = 0.391$, $p < 0.001$. The correlation between motivation and the topics covered in class was also significant, $r(132) = -0.420$, $p < 0.001$. The correlation between the topics covered in class and the practicality of the course was significant, $r(132) = -0.353$, $p < 0.001$. Finally, the correlation between student motivation and the practicality of the course was significant, $r(132) = 0.439$, $p < 0.001$. In general, how the participants perceived the difficulty of the course are not correlated to their final grades, course attendance, how they felt about the topics covered in class, how useful and practical they think the course is and their motivation.
Table 2. Correlations of the Six Variables

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
<th>Attendance</th>
<th>Difficulty</th>
<th>Topics</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>0.391**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty</td>
<td>-0.194*</td>
<td>0.014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>-0.027</td>
<td>0.012</td>
<td>0.028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>0.006</td>
<td>0.030</td>
<td>-0.081</td>
<td>-0.420**</td>
<td></td>
</tr>
<tr>
<td>Practicality</td>
<td>0.033</td>
<td>0.082</td>
<td>-0.083</td>
<td>-0.353**</td>
<td>0.439**</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

The questionnaire also elicited information about how much time they typically spend preparing for the course; how often they were late for the class, and how many times they missed the class. The results from these questions show that the participants typically spend about 1 – 3 hours preparing for the course (M=1.76, SD=0.762), which include doing the reading and homework assignments, as well as studying for tests and exams. It was also found that the participants typically were not late to class (M=1.40, SD=0.561) and many of them have not missed the class more than one time (M=1.63, SD=0.861).

5. Findings and Discussion

The results of the Pearson correlation coefficients showed that 4 out of the 15 correlations were statistically significant. First, the results showed a significant correlation between final scores and course attendance. This was in accordance with previous studies where a positive correlation was found between class attendance and academic performance (Chen & Lin, 2008; Cohn & Johnson, 2006; Lin & Chen, 2006; Thatcher, et al., 2007; Wigley, 2009). The attendance rate of the participants in this study was also much higher than the reported average attendance rate in previous studies such as Cohn and Johnson (2006) with 78.5%, Thatcher, et al. (2007) with 40 – 65%, and Lin and Chen (2006) which had cumulative attendance rate of 67.7%. The study by Chen and Lin (2008) had an actual attendance rate of 91 percent, which was closer to the result found in the current study. One reason to explain the similarities is that the current study and the study by Chen and Lin (2008) were both conducted in Taiwan, which has a required attendance policy with penalties for unexcused absences in most institutions. This may keep students from missing classes even if they do not want to come.

From the Pearson correlation coefficients, there was a significant correlation between the participants’ motivation for coming to class and how practical and useful they think the class is to them in the future. This result was expected since the participants were students in an elective course called Introduction to English Teaching Methodology. This is similar to Friedman et al. (2001) which saw higher attendance rates in elective courses than required courses. Students would also tend to feel the course is more practical and useful since most of the participants were English majors and a career in teaching English is very popular in Taiwan.
What was interesting was the negative correlation between the variables motivation and topics as well as the variables practicality and topics. For the former, it means that the participant’s motivation towards attending the course goes down when the topics in the course are interesting. For the latter, it means that the participants think that the course is more practical when they are not interested in the topics covered in the course. Although weak correlations should be taken with a grain of salt, this finding does reveal some possible characteristics about these students when choosing courses; learning may not be one of their main concerns. One assumption to why students’ motivation may go down when they feel the topics in the course are interesting and challenging is because some students probably do not really want to learn or care about learning. Although the students may think the topic is interesting, but if there is too much work involved, such as too many homework assignments and tests, the students may actually resent the course and does not feel like coming to class. This might explain why in large lecture classes, there are always a number of students sitting in the back rows talking to their friends and not paying attention to the lectures. As in Friedman, et al. (2001), more students tend to miss large classes because their attendance is not noticed, necessary, or consequential. However, in Taiwan, since attendance is required, their motivation for coming to class might be that they can talk with their friends because they may not care about what is being taught at all. For these students, when being challenged and pushed by the professor, they may resent the course since the purpose of their schooling may not be to learn the content materials, they may simply just want the credits so they can graduate. A similar assumption could be applied to why the participants think a course like Teaching Methodology is practical yet the topics covered in the course are boring. Perhaps the students know the value and the usefulness of a course like Teaching Methodology because many of them could easily find work teaching English in Taiwan. However, this finding may suggest that students understand the value of education, but they may not care about what is being taught. Perhaps these students represent the attitudes of some students who attend the university for the sake of a bachelor’s degree but does not really care about what is being learned. These students simply see their university degree as a tool to help them get a job and they will find the easiest way to do so without all the hard work.

From the results of the study, what could be suggested is that for Taiwanese students, how well they perform in a course may have nothing to do with what they think about the course. Most Asian students are capable of memorizing facts and figures for tests and exams even though they are not interested in the content of the course. This was in accordance with the stereotypical view of previous research (Ballard & Clanchy, 1984; Bradley & Bradley, 1984; Samuelowicz, 1987). In this case, we would have students with high course attendance rates and high course grades but with low motivation to come to class and little interests in the course topics.

6. Conclusion

This study examined the relationship between students’ attitude towards their class and their overall performance. While previous studies examined the relation between course attendance and course performance, this study also included in the analysis the level of difficulty of the course, the topics covered in the course, their motivation towards attending the course, and
whether or not the participants felt that the course is practical and useful to their future. The results of the study showed that there was a significant correlation between class attendance and class performance and also between the participants’ motivation for coming to class and how practical and useful they think the class is to them in the future. What was interesting was the negative correlation between the variables motivation and topics as well as the variables practicality and topics. The finding that none of the variables of Difficulty, Topics, Motivation, and Practicality were significantly correlated to course attendance and course performance suggests that Taiwanese students can study and perform well in courses even though they are not interested in the content of the course. They are able to study for the sake of passing an exam.

Teachers in Taiwan should not have to worry about class attendance since most institutions have a required attendance policy. However, there are several pedagogical implications that we can infer from this study. First, it is important that the course content is not too difficult or too easy. For courses that are too easy, the learners may feel like they did not learn anything. If the course is too difficult, the learners may feel that they do not understand anything. Worst of all, students who constantly perform poorly on tests and exams may also feel disappointed about the learning process and lose their intrinsic motivation for studying. Therefore, it is important that teachers monitor the students’ progress and make changes to their courses on a regular basis. Second, there are other reasons why a student would be motivated to come to class. Some of the reasons may not have anything to do with the course content. Besides being forced to because of school policy, maybe they enjoy coming to class because they can be with their friends or perhaps the student finds the instructor’s teaching method interesting. This suggests a reminder to teachers of the importance of classroom management to prevent students in the class from disrupting others by chatting with their friends because they are forced to be in class, not because they want to. In addition, teachers should make teaching preparation and classroom environment an important part of student’s learning. If teachers can create a good learning environment with rich learning materials, students would come to class for the enjoyment of learning and they would feel that their time is not wasted. Finally, teachers need to accept that students will be absent from class for various reasons and should not regard absenteeism personally. Because of the diligent nature of the students in Taiwan, good students will still do well on tests and exams. Students who fail a course would have failed regardless of penalties imposed on attendance (Moore, 2005). If students miss a few classes, this study showed that Taiwanese students can still do well in the course. However, this does not mean students should only come on the days of an exam. Teachers with attendance policies should still strictly reinforce their attendance policies. When teachers stress the importance of attendance, students’ grades will also improve (Chenneville and Jordan, 2008).

7. Suggestion for Future Studies

In this study, it was also interesting from the results of the study that the variables Difficulty, Topics, Motivation, and Practicality were not significantly related to class attendance and class performance. Perhaps it is due to the design of the questionnaire or the sample size. Maybe those variables would be correlated to each other if different research designs were
used. For example, in addition to using likert-scales in the survey, the use of open-ended questions might give us a different insight and a different answer to the relationship between students’ attitudes and course outcomes. In addition, asking students to give a subjective rating for the variable Difficulty may not be the most accurate method to measure the difficulty of a course. These are just some of the problems in the research design that should be addressed in future studies.

References


Moore, R. (2005). Attendance: Are penalties more effective than rewards? *Journal...
Developmental Education, 29 (2), 26-32.


Appendix 1. Student Survey

Course Survey

Please do not put your name or student number on this sheet. This is a course evaluation this is going to be used by the instructor to find out how to improve the course. Please answer the questions as accurately and as truthfully as you can.

1. What year of school are you in?
   - 1st Year
   - 2nd Year
   - 3rd Year
   - 4th Year

2. Are you a English major
   - Yes
   - No

3. You are:
   - Male
   - Female

4. How would you rate the level of difficulty of the course?
   - Very easy
   - Easy
   - About right
   - Difficult
   - Very difficult

5. What do you think about the topics covered in the course?
   - Very boring
   - Boring
   - About right
   - Interesting
   - Very interesting

6. On a scale of 1 – 5, rate the level of your motivation towards attending this course.
   - Not motivated
   - Very motivated
   1 ……… 2 ……… 3 ……… 4 ……… 5

7. On a scale of 1 – 5, do you think that this course is practical and useful to you in the future?
   - Not useful
   - Very useful
   1 ……… 2 ……… 3 ……… 4 ……… 5

8. Outside the classroom, how much time do you typically spend preparing for the course?
   - 0 – 1 hour
   - 2 – 3 hours
   - 4 – 5 hours
   - More than 5 hours

9. How often were you late to class?
   - Never
   - Sometimes
   - Often
   - Always

10. How many times have you missed the class?
    - 0 times
    - 1 time
    - 2 times
    - 3 or more times
Appendix 2. Pearson correlation summary

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
<th>Attendance</th>
<th>Difficulty</th>
<th>Topics</th>
<th>Motivation</th>
<th>Practicality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Score</strong></td>
<td>1</td>
<td>.391**</td>
<td>-.194*</td>
<td>-.027</td>
<td>.006</td>
<td>.033</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.025</td>
<td>.761</td>
<td>.942</td>
<td>.701</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td><strong>Attendance</strong></td>
<td>.391**</td>
<td>1</td>
<td>.014</td>
<td>.012</td>
<td>.030</td>
<td>.082</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.871</td>
<td>.887</td>
<td>.731</td>
<td>.344</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td><strong>Difficulty</strong></td>
<td>-.194*</td>
<td>.014</td>
<td>1</td>
<td>.028</td>
<td>-.081</td>
<td>-.083</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.025</td>
<td>.748</td>
<td>.351</td>
<td>.341</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td><strong>Topics</strong></td>
<td>-.027</td>
<td>.012</td>
<td>.028</td>
<td>1</td>
<td>-.420**</td>
<td>-.353**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.761</td>
<td>.748</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>.006</td>
<td>.030</td>
<td>-.081</td>
<td>-.420**</td>
<td>1</td>
<td>.439**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.942</td>
<td>.351</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td><strong>Practicality</strong></td>
<td>.033</td>
<td>.082</td>
<td>-.083</td>
<td>-.353**</td>
<td>.439**</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.701</td>
<td>.341</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
<td>134</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed)

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