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THE RELATIONSHIP BETWEEN STUDENT ENGAGEMENT AND TERTIARY LEVEL ENGLISH LANGUAGE LEARNERS’ ACHIEVEMENT

*Research Article*

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Abstract

The aim of this study was to investigate the interaction between student engagement and achievement. The study sample was composed of 296 at Ufuk University in Ankara, Turkey. The participants were enrolled in the intensive English language program of the foreign language Preparatory School of the institution. Data collection was carried out with the Mazer’s (2012) Student Engagement Scale, which was adapted to Turkish by Uğur and Akın (2015). Students’ English achievement was measured by their mid-term exam results. Statistical analysis revealed participants to be more engaged in silent in class behaviors followed by out of class behaviors, thinking about course content, and out-of-class behaviors. Moreover, it was found that participants had low engagement levels in oral in class behaviors. All types of engagement had a positive correlation with mid-term exam scores. Among all types of engagement behaviors, oral in class behaviors was the only predictor of students’ exam scores.

Keywords: student engagement, achievement, foreign language learning

1. Introduction

The concept of academic achievement in higher education has been and is still a sophisticated and multifaceted area of research. In the past decades, theories and projections related to the factors affecting academic achievement have been proposed. The body of literature in this respect discloses that academic achievement is implicitly or explicitly depended upon manifold factors (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Perna & Thomas, 2008; Van Den Berg & Hofman, 2005). Common ground among these perspectives in the college impact literature is the notion that academic and social integration into the higher education learning environment is a must to achieve desirable learning outcomes (Jansen & Bruinsma, 2005; Keup, 2005/2006; Kuh et al., 2007; Pike & Kuh, 2005; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). The core premise of this viewpoint underpins the integration theory posited by Tinto (1975), which proposes that success in higher education is highly dependent on students’ academic and social engagement in their institutions. Other models that lay stress on engagement as an important element in learning are the involvement theory (Astin, 1984), student development model (Pace, 1990), and engagement model (Kuh, 2001; 2003). Even though the categorization of learning behaviors is different in these models, they all emphasize student engagement as the core of achievement. According Astin (1984) students’ integration and academic development is highly influenced by the active role students take in the learning process; and he asserted that the mental and physical engagement of students in the learning experience leads to positive academic outcomes. In the same vein, Pace (1990) pointed out that quality of learning is improved via student endeavors towards learning and that its those efforts that are the most important determinant of academic outcomes. Similarly, in Kuh’s (2001; 2003) model of engagement, it was emphasized that engaging in educationally purposeful activities led to desired academic outcomes. The importance of student engagement is also highlighted in the related line of literature. It was determined that engaged students reported higher levels of
motivation, interest (Mazer, 2012), satisfaction (Kuh, 2009) as well as greater affective and cognitive learning (Frymier & Houser, 2016; Mazer, 2012).

In light of the theoretical positions and studies promoting the importance of student engagement in achieving desired learning outcomes, student engagement in higher education was acknowledged as a notable multifaceted construct that may actualize owing to a variety of personal and contextual factors (Fredericks, Blumenfeld, & Paris, 2004) and research in this respect has been popular over the past three decades. Whereas some researchers investigated the link between engagement and achievement in higher education found a positive correlation between engagement and academic achievement (Astin 1977, 1993; Indiana University Center for Postsecondary Research, 2002; Pike, Schroeder & Berry 1997; Tross, Harper, Osher & Kneidinger 2000; Kuh, Cruce, Shoup, Kinzie, and Gonyea, 2008; Salanova, Breso, & Schaufeli, 2005; Handelsman, Briggs, Sullivan, & Towler, 2005) some studies did not (Manzano 2002a, 2002b, 2004; Martinez & Salanova, 2003). However, studies investigating the link between engagement and achievement in the foreign language teaching learning context are quite limited to date and researching the link between engagement and achievement in this context can provide valuable insights. For that reason, this paper centers upon the relationship between engagement and achievement in the learning English as a foreign language context by analyzing the student engagement make up, by examining the relationship between dimensions of student engagement and achievement, and by exploring the predictors of achievement with respect to dimensions of student engagement.

1.1. Literature Review

1.1.1. Student engagement

Formerly referred as the theory of college student involvement, the engagement theory developed by Astin (1993) posits active students to be those who dedicate a substantial amount of energy to their studies, that are active in their educational institutions, and those who communicate and interact with instructor and fellow students (Astin, 1984). Emphasizing the importance of active participation in the learning process, the theory literally posits successful students to be those who are more engaged (Astin, 1984). According to Astin (1984), engagement is the physical and psychological impetus allocated by students in their academic work. Other prevalent definitions of engagement characterize it as students’ involvement (Ball & Perry, 2011) and psychological, cognitive, emotional and behavioral reactions (Gunuc & Kuzu, 2014) in educationally purposeful endeavors. Other student behaviors that were identified as forms of engagement were time allocated to tasks, quality of effort, student participation, and deliberation of learned material outside of the class (Hu & Kuh, 2002; Mazer, 2012). In general, those students who expend more affective, behavioral and cognitive effort in their academic endeavors are considered to be engaged students (Fredricks, Blumenfeld, & Paris, 2004; Kuh, 2009; Mazer, 2012).

As can be seen above, researchers have submitted several ways to qualify engagement, which highlights the complexity of the phenomenon. Among many conceptualizations of student engagement, it’s that of Mazer (2012) that underpins this study. According to Mazer (2012), there are four types of student engagement that are termed silent in-class behaviors, oral in-class behaviors, thinking about course content, and out-of-class behaviors. In this conceptualization, silent in-class behaviors can be defined as presence in the class and paying attention to what the instructor and other students are communicating whereas oral in-class behaviors on the other hand can be construed as oral participation in the activities carried out in the class. On the other hand, the type of engagement labelled as thinking about course content is characterized as the out-of-class consideration of how course materials relate to
one’s life and how one can make use of this knowledge in their daily lives as well as future careers. Lastly, out-of-class behaviors can be portrayed as talking about and studying class content.

1.1.2. Student engagement and learning outcomes

Engagement as a concept has been a popular research area; and research in this field have yielded favorable results with respect to the relationship between engagement and positive outcomes. Positive correlations were find between engagement and general abilities and thinking (Kuh, 2003; Pascarella et al., 1996; Pike, 1999, 2000; Shulman, 2002), competence in practical skills and the transferability of these skills (Kuh 1993, 1995); cognitive development (Astin, 1993; Pascarella, Seifert & Blaich, 2008); self-esteem (Bandura, Peluso, Ortman & Millard, 2000), and student persistence (Astin, 1993; Braxton, Milem & Sullivan 2000; Tinto, 2005).

Apart from such studies that have concentrated on manifold relationships, there are also studies that focalized on the relationship between student engagement and achievement at higher education institutions. For example, Carini, Kuh, and Klein, (2006), who used data from the National Survey of Student Engagement (NSSE) and Kuh et al. (2001) who included data from fourteen four year colleges and universities in the U.S. both concluded that engagement and grades were positively linked for many measures of student engagement. In a study aimed at exploring the link between engagement and the achievement of health care student in Spain, Casuso-Holgado, et al. (2013) ascertained engagement to be one of the main positive factors involved in academic achievement. Likewise, Gunuc (2014), in his study carried out at the education faculty of a state university in Eskişehir/Turkey, also asserted a significant positive relationship between student engagement and academic achievement. In a study carried out studying the predictors of success at a state university in Ankara/Turkey, Çapa-Aydın, Yerin-Güneri, Barutçu-Yıldırım, and Çağ (2015) concluded engagement to be a significant predictor of GPA. In the same vein, Akbari, Naderi, Simons, and Pilot (2016) found a significant high correlation between student engagement and English language learning in their study aimed at investigating the influence of using social networks on learning with a sample of Iranian PhD students.

Moreover, some there are also studies that have specifically concentrated on the relationship between student engagement and achievement using measures related to silent in-class behaviors, oral in-class behaviors, thinking about course content, and out-of-class behaviors.

Studies focusing on the association between silent in-class behaviors and achievement not surprisingly revealed significant positive links and effects. In a study realized in the US, Siciliano (1978), revealed a positive link between attendance and achievement in a research that was carried out with students of Romance languages. In another investigation undertaken in Taiwan, Kelsen and Liang (2012), revealed attendance to be one of the most significant indicators of achievement for students of English language. In a study that included Chilean students of an English pedagogy program; Fay, Aguirre, and Gash (2013), concluded a positive association between attendance and achievement in the target language and content. In studies carried out in the Turkish higher education context, Özkanal and Arıkan (2011), Bahar (2015), and Karabiýik (2016) also revealed significant positive associations between attendance and English achievement.

Another line of research on the other hand, concentrated on oral in-class behaviors. In a study realized with 13,121 eight grade students in the U.S. Voelkl (1995) concluded in-class participation to have a significant influence on achievement. Investigating the predictors of
achievement in Literature in English classes in Nigeria. Fakeye and Amao (2013) concluded that in-class participation was the only significant predictor of achievement for a sample of 500 second grade secondary school students. Similarly, Zheng and Warschauer (2015) on the other hand investigated the effect of student participation in an online discussion environment on student achievement with a sample of 48 fifth grade English language learners and reported that high participation and interaction lead to development in language and literacy in English. In another study carried out in Indonesia with 894 high school students, Syaveny and Johari (2017) revealed that in-class participation significantly correlated with English achievement.

On the other hand, in studies that focused on the relationship between thinking about course content and achievement, positive results were reported. In a study carried out by Lee and Loughran (2000) with 6 teacher trainees studying at an Australian university, it was concluded that reflection fostered learning. Similarly, Kealey, Holland, and Watson (2005) found critical thinking to be a significant predictor of performance in a research conducted with 178 students in a principles of accounting class at a Midwestern university. In a study carried out in the Iranian EFL context involving 82 university students, Ghanizadeh and Mirzaee (2012) revealed higher order thinking to be a predictor of achievement. In another study undertaken in the Iranian context, Ghasemi and Dowlatbadi (2017) researched 190 undergraduate students majoring in English and concluded higher order thinking as being a predictor of language achievement.

Moreover, another interesting line of research focused on the relationship between out-of-class student behaviors and success. Green and Oxford (1995) found a high correlation between reading for pleasure and overall language proficiency in a study carried out with 374 undergraduate students in Puerto Rico. Furthermore, Krashen (2003) revealed a positive effect of extensive reading on L2 achievement in his study carried out in Turkey with international student attending British Council. Investigating English learning via out-of-class activities, Chausanachoti (2009) concluded that out-of-class language learning activities was beneficial for improving foreign language proficiency among 42 undergraduate English learners in Thailand. Moreover, researching the gains of extensive listening in English language learning with 16 undergraduate students in Mexico, Ucán, (2010), also concluded extensive listening to be beneficial to L2 improvement.

1.2. Research questions

In light of the review of the related line of literature, there were certain reasons that motivated this study. To begin with, studies on the relationship between student engagement and achievement in the foreign language learning context are limited. Moreover, predictive nature of different types of student engagement on student’s language achievement is also an under-researched field of investigation in the foreign language learning context. On the whole, engagement and its relationship to student achievement is a worthy area of investigation. Therefore, this study addressed the following research questions:

1. What engagement types are manifested by the participants?
2. What is the relationship between types of engagement and English achievement?
3. What is/are the predictor(s) of English achievement with respect to different engagement types?

2. Method

2.1. Setting and participants

The study included a sum of 296 undergraduate students who volunteered for the study selected via convenience sampling. 145 of the participants were female and 151 were male;
and they were aged between 18 and 24. The participants were enrolled in Ufuk University Preparatory Language School, which offers intensive English classes in listening, speaking, reading and writing over two semesters. Students are periodically assessed via monthly quizzes and a mid-term exam. The passing grade score for these assessments were 60 out of a 100. At the end of the academic year, students are administered a proficiency test to determine whether they are competent enough in English to pursue their undergraduate programs; and those who fail the proficiency test have to repeat the program.

2.2. Instruments

2.2.1. Student engagement scale

The instrument is a scale designed to assess in and out of class engagement behaviors of students by Mazer (2012). It was adapted to Turkish by Uğur and Akın (2015). The adapted version of the scale was used in this study. The scale is composed of 13 items scored on a 7 point Likert scale ranging from absolutely inappropriate (1) to absolutely appropriate (7) and has four sub-dimensions that are silent in class behaviors, oral in class behaviors, thinking about course content, and out of class behaviors. The reliability coefficients of the original scale were .86 for silent in class behaviors, .96 for oral in class behaviors, .92 for thinking about course content, and .82 for out of class behaviors, whereas the scale had a total reliability score of .90 (Mazer, 2012). The Cronbach’s alpha values reported in the adaptation study were .81 for silent in class behaviors, .88 for oral in class behaviors, .84 for thinking about course content, and .81 for out of class behaviors; and .85 for the scale in total (Uğur & Akın, 2015). On the other hand, the scale reliability estimates for this study were .81 for silent in class behaviors, .83 for oral in class behaviors, .83 for thinking about course content, and .78 for out of class behaviors; whereas the Cronbach’s alpha value for the scale in total was .87.

2.2.2. Demographic information form

The form consisted of two items asking students to write their gender and mid-term exam scores.

2.4. Data collection and analysis

Data for this quantitative study were collected via printed copies of the demographic information and the Turkish version of the Student Engagement Scale (Uğur & Akın, 2015). First, data was analyzed for possible missing data and outliers to make the data fit for analysis and then the normality, linearity and multicollinearity, homoscedasticity assumptions were examined to carry out the multivariate analyses (Tabachnick & Fidell, 2012).

After that, data were analyzed using descriptive and inferential statistics via SPSS 20. Descriptive statistics were used to examine participants’ achievement and engagement make-up, whereas the link between achievement and different dimensions of student engagement were examined by Pearson correlation coefficients. Lastly, a regression analysis was employed to explore whether any causal connection is evident between student engagement and achievement.

3. Findings

3.1. Participants’ achievement

Analysis of the descriptive data showed that students’ had admissible exam scores (M= 66.33, SD= 16.30). Female students (M= 66.98, SD= 16.44) achieved slightly higher exam scores compared to their male counterparts (65.70, SD= 19.19). Yet, the difference between female and male students was not significant (t(294) = .68, p > .05).
3.2. Participants’ engagement make-up

In order to assess the engagement make-up of the participants, descriptive statistics were calculated. Results are summarized in Table 1 below.

Table 1. Descriptive statistics for engagement types

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Silent in class behaviors</td>
<td>13.80</td>
<td>3.13</td>
</tr>
<tr>
<td>2. Oral in class behaviors</td>
<td>6.57</td>
<td>2.02</td>
</tr>
<tr>
<td>3. Thinking about course content</td>
<td>10.57</td>
<td>2.90</td>
</tr>
<tr>
<td>4. Out of class behaviors</td>
<td>12.55</td>
<td>3.72</td>
</tr>
</tbody>
</table>

As evident in Table 1, descriptive statistics ascertained that participants reported silent in class behaviors (M = 13.80, SD = 3.13) more than oral in class behaviors (M = 6.57, SD = 2.02), thinking about course content (M= 10.57, SD= 2.90), and out of class behaviors (M = 12.55, SD = 3.72).

3.3. Relationship between achievement and student engagement

Interaction between different dimensions of student engagement and achievement was established via a Pearson correlation coefficient test. Related results are presented in Table 2.

Table 2. Relationship between engagement type and achievement

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Achievement</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Silent in class behaviors</td>
<td>.18*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Oral in class behaviors</td>
<td>.29*</td>
<td>.53*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Thinking about course content</td>
<td>.22*</td>
<td>.48*</td>
<td>.48*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Out of class behaviors</td>
<td>.15*</td>
<td>.46*</td>
<td>.37*</td>
<td>.37*</td>
<td>1</td>
</tr>
</tbody>
</table>

*p>0.001

When Table 2 is analyzed, achievement as determined by the mid-term English exam results of the participants correlated positively with all aspects of engagement that are silent in class behaviors (r(294)= .18, p< .05), oral in class behaviors (r(294)= .29, p< .05), thinking about course content (r(294)= .22, p< .05), and out of class behaviors (r(294)= .15, p< .05).

3.4. Predictors of achievement

After determining significant correlations between achievement and engagement types a multiple regression analysis was carried out to identify whether any engagement type is a stronger predictor of achievement compared to others. As a first step, assumptions of normality, linearity, and homoscedasticity was carried out by examining scatterplots and it was seen that no assumption was violated in these respects (Tabachnick & Fidell, 2012) and the sample size (N= 296) was large enough. Moreover, the data was also checked for the multicollinearity by examining whether any of the independent variables were correlated more than 0.90 (Tabachnick & Fidell, 2012) with each other. As correlation coefficients between independent variables were less than 0.90 as can be seen in Table 2, assumption of multicollinearity was also met.
Next, a multiple regression analysis was used to predict students’ achievement based on types of engagement and the results are summarized in Table 3.

Table 3. Multiple regression analysis regards predictors of achievement

<table>
<thead>
<tr>
<th>Source</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silent in class behavior</td>
<td>.00</td>
<td>.38</td>
<td>.00</td>
<td>.01</td>
<td>.99</td>
</tr>
<tr>
<td>Oral in class behaviors</td>
<td>1.86</td>
<td>.56</td>
<td>.23</td>
<td>3.32</td>
<td>.00</td>
</tr>
<tr>
<td>Thinking about class content</td>
<td>.55</td>
<td>.38</td>
<td>.10</td>
<td>1.46</td>
<td>.15</td>
</tr>
<tr>
<td>Out of class behaviors</td>
<td>.11</td>
<td>.29</td>
<td>.03</td>
<td>.40</td>
<td>.69</td>
</tr>
</tbody>
</table>

R= .30; R²= .09; F= 7.35 ; P< .00

A significant regression equation was found (F(4, 291) = 7.35, p<.00), with an R² of .09. As can be seen from the Table 3, oral in class behaviors was the only significant predictor of students’ achievement; explaining only .9% variation (R²= .09).

4. Discussion

The preeminent goal of foreign language education is to help learners achieve competence in a language other than his or her native language. Yet, there are many factors that determine learners’ success or failure in mastering a foreign language; and each one of these determinants are worthy of study. In this study the concept of student engagement was studied in relation to achievement in English in the Turkish foreign language learning and teaching context.

This study revealed silent in class to be comparatively more predominant than other types of engagement. It was utterly disappointing to see that participants reported low levels on engagement with respect to oral in class behaviors. Foreign language classes are active learning environments with the goal of fostering communicative competence, which is gradually achieved by synthesizing input. Silent in class behaviors in this respect inhibit the effective synthesis of input (Smith, 1977) and therefore inhibit learning. However, such silent in class behaviors are not uncommon in the Turkish educational context. Tatar (2008) attributes Turkish learners’ silent in class behaviors to socio-cultural and educational factors as they still engage in learning in fairly teacher centered classes where they do not orally participate in classes without being called on by the teacher. Another reason behind this might be attributed to the oral incompetence of Turkish foreign language learner. In this respect Baykal (2010) argued Turkish foreign language learners to be insufficient in the communication aspect of foreign languages and further asserted that they were incapable of even producing simple utterances (Baykal, 2010). Other reasons behind Turkish foreign language learners’ silence in the classroom are identified as communication anxiety, fear of making mistakes, fear of negative evaluation, concern over accuracy, concern over getting low marks, lack of confidence, low opinion of themselves, lack of fluency, and thinking about personal problems (Baykal, 2010).

As for the relationship between student engagement and achievement, all four types of engagement correlated positively with students’ achievement in English. Oral in-class behaviors had the highest level of correlation with student achievement followed by thinking about course content, silent in class behaviors, and out of class behaviors. This result is no surprise as engagement behaviors that facilitate greater cognitive investment are more likely to lead to favorable outcomes; and student achievement no exception in this respect (Greene, DeBacker, Ravindran, & Krows, 2004).
Among all types of student engagement only oral in class behaviors transpired as a significant predictor of student achievement. As languages are for communication; it’s no surprise that the primary determinant of student achievement was found to be oral in class engagement. In this respect, zero order correlations supported previous findings that in class engagement is a significant predictor of achievement (Fakeye & Amao, 2013; Syaveny & Johari, 2017; Voelkl, 1995; Zheng & Warschauer, 2015).

Based on the findings and discussion above it is not misleading to conclude that student engagement is a significant element in foreign language learning contexts like the Turkish context and that oral in class behaviors can be associated with student achievement in learning English as a foreign language. Future studies on student engagement can concentrate on teacher and student perceptions reasons behind disengagement and on ways to improve student engagement.
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