English Language Proficiency as a Predictor of Academic Performance in the College of Nursing, Kuwait

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Abstract
The English language proficiency of international students has gained considerable attention in the media, but more significantly in the academic realm. Proficiency in the English language is of prime importance and is regarded by numerous researchers as one of the determining factors of academic success. This study aimed to gain insight into the correlation of the English proficiency with the academic performance of all 50 students who have graduated from the College of Nursing, Kuwait in the Academic Year 2015 – 2016. Utilizing a retrospective and correlational research design, students’ records in levels one to five were reviewed. Data were collected through record review of graduate students. Data analysis utilized the Minitab version 14. Other tests used were the descriptive statistics, T-test, ANOVA and Pearson Product Moment Correlation, with p value set at less than 0.05. Results of the study revealed that there is a moderate correlation between the overall English language proficiency and the overall academic performance both in nursing courses, with p value of 0.001, and in non-nursing courses, with p value of 0.0. As the student’s period of stay in the college increases, there is a negative correlation with the following: English proficiency (-48%; p =0.0); academic performance in nursing courses (-50.6%; p=0.0); and, academic performance in the overall courses (-53.6%; p=0.0). For both, English language proficiency and academic performance, there is no relationship with other variables such as age, sex, and nationality. Findings of this study may facilitate modifications both in the English Language Program and strategies to make them more responsive to students’ needs in nursing and non-nursing courses, thereby leading to an improved academic performance of the students and ultimate enhancement of their productivity.

Keywords: English Language Proficiency. Academic Performance. Grade Point Average,

1. Introduction
Learning is a complex, multi-factorial activity whose outcomes in higher education are of paramount interest to students, teaching staff, researchers, tertiary education institutions and funding authorities (Zeegers, 2007). Studies have noted relationships between certain variables and academic success. The English language skills and approaches to learning were shown to have some predictive value on academic achievement (Zeegers, 2007). Literacy in the English language has been correlated with academic performance in the medical schools, as students who have better understanding of the subjects are those with better command of English (Sanip & Zulkifli, 2011). In the health sciences, Hassan et al. (1995) found a significant positive correlation between results in English and course results in the Alimentary system; however, results in the foundation sciences courses in the Cardiovascular, Respiratory and Urinary Systems were not correlated with English proficiency.

Students speaking English as a second language (ESL) confront considerable challenges in English language universities (Brown, 2008); however, not much is known about the relationship between English-language acculturation and academic performance (Salamonson, Y., 2008). ESL students tend to be viewed as a homogenous group without due consideration of heterogeneity in terms of generational status, cultural factors, and length of residence in their adopted country (Childs et al., 2004; Davidhizar & Shearer, 2005; Shukya & Horsfall, 2000).

In nursing education, lower academic achievement and more learning difficulties have been found among ESL students compared to their native English speaking counterparts (Brown, 2001; Gubde, 2003). A positive correlation between English language proficiency and academic performance was noted among 273 first year nursing students who speak English as a second language (Salamonson, 2008). Muller (2011) noted that nursing and midwifery international students generally fail assignments or are removed from clinical practice. This is due to their inadequate language skills which may be dangerous to patients.

Martirosyan (2015) revealed significant differences in language proficiency and multilingualism in relation to academic performance. The highest mean perceived English language proficiency is among students who spoke at least three languages. A large scale quantitative study by Oliver et al. (2012) analyzed data on 5,675 undergraduate and postgraduate students from one university’s database over a three year period to ascertain if its English language proficiency (ELP) requirements were sufficient to ensure the academic progress of adequate numbers of these students. The best evidence for potential academic success was found to be standardized tests.
while students submitting other forms of ELP evidence tended to have more difficulties.

Several studies have been conducted on the relationship of English language proficiency and academic performance among non-native English speakers; however, similar studies in the Middle East have barely been addressed. Most specifically, there have been no studies yet conducted on the relationship of English language proficiency and academic performance among Kuwaiti nursing students.

1.1 Significance of the Study
Several factors (e.g., socio-demographic variables) that affect academic performance of students have been identified in the literature. Language proficiency is considered one of the significant factors. Through this study, correlation between the English language proficiency and academic performance of students in the College of Nursing was sought to be established. If at all correlation exists, changes in teaching the English language to include curriculum and teaching strategies could be explored and modified to make them more relevant to the Nursing courses. Eventually, the goal would be to improve the academic performance of the students, which could ultimately enhance their confidence and productivity levels.

1.2 Aims
The aims of the study were to:

1. assess the overall level of English language proficiency of the participants and their specific proficiency levels in the different content courses that use English as a medium of instruction;
2. evaluate the overall academic performance of the participants in professional nursing courses and their specific performance level in the nursing content courses;
3. determine the overall academic performance of the participants in general, to include both non-nursing courses and nursing courses;
4. test the relationship between socio-demographic variables, such as age, sex and nationality, and overall level of English proficiency, and academic performance specifically in nursing and in general, to include both non-nursing courses and nursing courses;
5. examine the relationship between non-academic factors such as length of study of the student and overall level of English language proficiency, and academic performance specifically in nursing and in general, to include both non-nursing courses and nursing courses;
6. correlate the overall English language proficiency and overall academic performance specifically in nursing and in general, to include both non-nursing courses and nursing courses;
7. assess the overall level of English proficiency as a predictor of academic performance.

1.3 Definition of Terms
1. English Language Proficiency (ELP) - refers to the grade in English obtained by the student in a particular semester.
2. Academic Performance (AP) - refers to the overall recorded grade point average obtained by the student:
   a. specifically in the Nursing courses (AP N) and in
   b. general, to include both the non-nursing courses and nursing courses (AP NN).
3. Grade Point Average (GPA) - refers to the grade achieved for the subjects taken by the student during the semester and takes into account the grade point value. GPA is calculated on the basis of the cumulative score for each assessment grade for each subject. This total score is then divided by the sum of the grade point value for the subjects studied, to obtain a final GPA value between one and four for the academic semester (4.0 = excellent; 3.00 = very good; 2.00 = good; 1.0 = fail). A GPA of 2.00 or higher is required for a passing grade in any particular subject and an overall pass for that academic semester.

2. Method
2.1 Design
A retrospective correlational research design was utilized for the study. A record review of all the students who graduated from the Associate Degree in Nursing program in the Academic Year 2015 – 2016 was conducted to trace back the performance of the students starting from their first level till the time they graduated. Focus was given on the student’s grades in three main areas including the different English courses offered by the College, the nursing courses, and the non-nursing courses.
2.2 Setting and Sample
The setting is at the College of Nursing, Kuwait whose student population is diversified, consisting approximately of 500 female and male students coming from countries in the Gulf Cooperative Council (GCC) and the Middle East. While the medium of instruction is the English Language, students predominantly use the Arabic language outside the classroom setting.

The College of Nursing, Kuwait is the only educational institution in the country which offers various programs – the Associate Degree in Nursing (ADN), the Bachelor of Science in Nursing (BSN) Generic, the BSN Post Basic, and the School Health Nursing.

The ADN program which consists of five levels with each level representing one semester is open for female and male students from GCC countries and the Middle East. On the other hand, the BSN Generic program could be completed in four years with each year composed of two semesters. This program is exclusively for Kuwaiti nationals, both females and males. For the Post Basic program, students who qualify are those who have finished the ADN program and would like to complete the BSN program for another two more years. The program on School Health Nursing is offered for four years, but is currently having only female students.

This study focused on students who graduated from the Associate Degree in Nursing Program in the Academic Year 2015 – 2016. The majority (80%) of the overall student population comes from this Degree program.

2.3 Participants
Participants included all students who graduated in the Academic Year 2015 - 2016, second semester in the Associate Degree in Nursing (ADN) program of the College of Nursing, Kuwait. There was a total of 50 students (38 females and 12 males).

2.4 Ethical Consideration
Permission to conduct the study was initially sought from the Research and Scientific Committee of the Associate Degree in Nursing Department of the College. Upon approval, endorsement was done to the Research Committee at the College level. Subsequently, the request was forwarded for permission from the Research Department in the Public Authority for Applied Education and Training (PAAET) under the Ministry of Higher Education, Kuwait, to which the College of Nursing belongs.

2.5 Data Collection
Data were collected through record review of the participants, starting from their initial level in the ADN program till the time they graduated. Such review was conducted after permission was granted by PAAET. A letter requesting review of records was utilized to facilitate obtaining relevant data. Data gathered were on the grades in the different English courses offered in the ADN program of the College, namely: English 101, English 114, English 213, and English 214. Moreover, their general grade point average specifically on the nursing courses and in general, to include both the non-nursing courses and nursing courses were all taken into account in the review. The nursing courses included: Fundamentals of Nursing, Nursing Care of Adults, Nursing Care of Family, Nursing Care of Adults and Family, Community Nursing, Professional Issues in Nursing and Nursing Practicum. Included in the non-nursing courses were: Human Anatomy and Physiology, Introduction to Psychology, Pharmacology, Pathophysiology, Microbiology; Principles of Human Nutrition, and Islamic Culture.

2.6 Data Analysis
Data were analyzed using the Minitab version 14. Aside from descriptive statistics, a T-test was utilized to compare the English Language Proficiency (ELP) of the students in the different levels; the GPA of the students in Nursing courses and in non-Nursing courses. Furthermore, a comparison between the English proficiency of female and male nursing students as well as their performance in the Nursing and non-Nursing courses was done using the T-test. ANOVA was used to determine any difference in the English proficiency and academic performance according to demographic variables. Correlation between English proficiency and academic performance was tested by the Pearson product moment correlation. A significant p-value was set at less than 0.05.

3. Results
The study consisted of the 50 graduate students in the College of Nursing, only 12 (24%) of whom are males. Paradoxically, Kuwaiti nursing students represent only 12% while 88% come from either the Gulf Cooperative Council countries (GCC), other Arab countries and non-Arab countries. In terms of age, 70% were aged from 21
to 25 years, 22% from 25 to 30 years, and 8% were 30 years and older (Figure 1).

3.1 Overall English Language Proficiency and Overall Academic Performance in Nursing and Courses in General

The results revealed that there was a moderate correlation between the overall English language proficiency and the overall academic performance in nursing courses with a p value of 0.001, and r of 45.4% (Table 2; Figure 2). Similarly, there was a moderate correlation between the overall English language proficiency and the overall academic performance in general, to include both the non-nursing and nursing courses, with a p value of 0.0, and r of 68.7 (Table 2; Figure 3). Table 1 indicated that the highest mean average was in the overall English language proficiency (M = 7.540) while the lowest mean average was in the overall academic performance in Nursing (M = 5.898).

3.2 English Language Proficiency

The results indicated that there was no change in the English language proficiency as the student moved up from the first English course (E101) to the next English level (E114) wherein p = 0.57. From the second English course (E114) to the third English course (N213), there was also no increase in English proficiency, wherein p = 0.07. Moving up to the highest English level, the p value of 0.659 also showed that there was no enhancement in English proficiency.

3.3 Academic Performance in Nursing

The results revealed that there was an increase in the academic performance in nursing as the student moved up from the starting English course (E101) to English 114 as shown by the p value (p = 0.016). However, there was no change in the academic performance in nursing as the student moved up to the other English levels.

3.4 Academic Performance in General

The results did not show any significant increase in the academic performance of the student in general even as student moves up to the higher English level. This included performance in both the non-nursing and nursing courses.

3.5 Correlation of English Proficiency and Student’s Length of Study

The results showed that there was a negative correlation (-0.48%) between the English proficiency and the student’s length of study in the College, wherein p = 0.0. As the student stayed longer in the College, the English proficiency decreased.

3.6 Correlation of Academic Performance in Nursing and in General, and Student’s Length of Stay

The results indicated a negative correlation (p = 00; r =-50.6%) between overall academic performance in nursing and student’s length of study in the College. The student’s academic performance in nursing decreased as the student’s length of study in the College increased. Moreover, there was a negative correlation between the academic performance in general and the student’s length of study in the College, with a p value of 0.0 and r = −53.1%.

3.7 English Proficiency and Gender

The results showed no correlation between English proficiency and gender wherein p = 0.215; r =-17.8%. There was no change in the English proficiency of boys as compared to girls as the student moves up to the higher English level.

3.8 Academic Performance and Gender

The results revealed that there was no change in the academic performance in nursing of boys compared to girls as the student moved up to the higher level (p = 0.992). Similarly, academic performance in general courses of boys compared to girls did not change as they advanced to the higher level, wherein p = 0.547.

3.9 English Proficiency and Nationality

The results concluded that English proficiency had no correlation with nationality (p = 0.674). In terms of academic performance, there was also no correlation with nationality (p = 0.7).

4. Discussion

The present study supports findings of other studies (e.g., Salamonson, 2008) regarding English as a determining factor of academic excellence, as students with better command of English are thought to have better understanding of the subjects compared to students who have poor command of English (Salamonson, 2008).
Language proficiency of students from non-English speaking backgrounds (NESB) might, therefore, be a key factor in their academic success (Daller & Phelan, 2013).

As can be gleaned in the present study, the academic performance in nursing of the student improves from the initial English course to the next, but would no longer have a change as the student moves to the higher levels. This finding is supported by Oducado and Penuela (2014) who found the first-semester GPA to be the best indicator of international students’ potential academic success.

The present study also lends support to Oducado and Penuela’s (2014) study which revealed that academic factors are better predictors of academic performance in professional nursing courses. Multiple linear regression analysis revealed performance in English and Science courses as predictors of participants’ academic performance in professional nursing courses. In the study of Addow et al. (2013) however, results showed that English language proficiency among the sample of Somalian students had an insignificant positive relation with their academic achievement and that there was an insignificant impact of English language proficiency on student academic achievement. The present study runs counter to the findings of Sanip and Zulkifli (2011), wherein there was no significant correlation between the English literacy and academic performance of the medical students in the Islamic Science University of Malaysia.

The sample in Sanip and Zulkifli’s (2011) study had nationality wherein English is a second language. Moreover, several empirical studies indicated that English proficiency plays a crucial role for international students in completing their studies in English-medium institutions, especially for those students whose first language is not English (Li et al., 2010). According to Boughton et al. (2010), students with English as second language (ESL) backgrounds require a high level of support to achieve academically during their nursing program and perform at the expected level during clinical placements.

In the present study, a negative correlation exists between the length of study in the College and English language proficiency, and academic performance. As the student stayed for a longer period, proficiency in English and academic performance decreased. Studies found that nursing students with ESL backgrounds tend to have difficulty with general and technical aspects of English which can affect academic performance (Guhde, 2003; Crawford and Candlin, 2013).

The present study reveals no correlation between English language proficiency and demographics such as age and gender; neither is there relationship between academic performance and gender. This non-correlation does not confirm with studies wherein certain non-academic factors such as gender could predict the academic performance of the students in various academic programs (Wolkowitz & Kelley, 2010).

The present study includes only 12% of male students. Males represent less than 10% of the nursing workforce in developed countries with some developing countries experiencing even lower participation rates (Oducado and Penuela, 2014). Although the number of men entering the nursing profession is increasing, societal stereotypes and the lack of male role model in nursing may have a negative impact on motivation, and ultimately, academic performance. Conversely, the study of Blackman et al. (2007) reported that achievement for beginning entry nursing students during their third year assessment of Nursing and Midwifery School in Australia is not related to student demographics such as age or gender. Gross (2011) also reported that common factors in the literature predictive of academic outcomes such as gender, were not found to be associated with academic achievement or performance. In the same manner, gender was not also a predictor of academic success in a Licensed Practical Nurse program at a two-year public technical college (Bancroft-McKenzie, 2008).

5. Conclusion
This study established correlation between the English language proficiency and academic performance, both in professional nursing courses and in the overall courses, of students in the College of Nursing, Kuwait. As the student’s length of study in the College increases, there is a negative correlation with the following: English proficiency, academic performance in nursing courses, and academic performance in the overall courses. Moreover, it concludes that English language proficiency is a better predictor of academic success, rather than non-academic factors such as gender, age and nationality.

6. Limitations and Recommendations
The sample size of this study is limited, considering the relatively small population of the College. A retrospective study was done for graduates of only one academic semester. Thus, it is recommended to consider conducting a similar study in a wider scope. Further studies can include identifying other variables which relate to academic performance such as attitude, motivation, study habits, and learning styles. Faculty influence and support could also be included as variables that may influence student’s academic performance.

The continuing challenge for educational institutions is to develop strategies focused on academic and overall factors appropriate to student cohorts and specific contexts. Particularly, for colleges and schools where English is a foreign language, a continuous needs analysis of the English language proficiency among students in each level should be conducted to facilitate responsive modification of the English language curriculum. This
will increase success of any intervention program, which may eventually lead to an overall improvement of academic performance, and ultimate enhancement of practice and productivity.

Acknowledgement
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References


Salamonson, Y. et al. (2008). English Language Acculturation Predicts Academic Performance in Nursing

Table 1. Descriptive Statistics: Overall English Language Proficiency and Overall Academic Performance

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Median</th>
<th>Maximum</th>
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<td>2.261</td>
<td>3.000</td>
<td>7.000</td>
<td>11.000</td>
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<tr>
<td>OAP Nursing</td>
<td>5.898</td>
<td>1.279</td>
<td>4.000</td>
<td>5.000</td>
<td>10.000</td>
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<tr>
<td>OAP General Courses</td>
<td>6.220</td>
<td>1.433</td>
<td>5.000</td>
<td>6.000</td>
<td>10.000</td>
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</tbody>
</table>

OELP = Overall English Language Proficiency  
OAP = Overall Academic Performance

Table 2. Correlations: Overall English Language Proficiency and Overall Academic Performance

<table>
<thead>
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<th></th>
<th>r</th>
<th>p</th>
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<td>OELP</td>
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<td>0.000</td>
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<tr>
<td>OAP Nursing</td>
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<td>0.000</td>
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<tr>
<td>OAP General Courses</td>
<td>0.454</td>
<td>0.687</td>
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</tbody>
</table>

OELP = Overall English Language Proficiency  
OAP = Overall Academic Performance

Figure 1. Pie Chart of Age
Figure 2. Scatterplot of Overall Academic Performance in Nursing and Overall English Proficiency

Legend: APO NN = Overall Academic Performance in Nursing
OEP = Overall English Proficiency

Figure 3. Scatterplot of Overall Academic Performance (Nursing and Non-Nursing) and Overall English Proficiency
Legend: APO NN = Overall Academic Performance (Nursing and Non-Nursing)
OEP = Overall English Proficiency