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The Omani Technical Students' Knowledge of English for Specific Purposes (ESP) Lexis and Their Attitudes Towards Learning ESP*

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In Oman, research on ESP has been attracting a great deal of attention in English language education over the past decade. Nevertheless, little attention has been paid to discover the relationship between the technical students' knowledge of the ESP lexis and their attitudes towards learning ESP in the Omani technical context. Therefore, this research study was conducted to do so and to explore whether the Omani technical students' knowledge of ESP lexis is predictable and is affected by a combination of their attitudes to learning ESP, their gender, and their age. Forty-eight questionnaires were distributed among participants (24 males and 24 females) aged between 24 and 27 years old. The study confirmed the positive relation between people's knowledge and their feelings; several recommendations were proposed. In addition, the study showed that technical students' attitude towards learning ESP is an issue that must be resolved as it negatively affects improving the students' knowledge of ESP lexes.

Keywords: English for specific purposes (ESP), knowledge of ESP lexis, learning ESP, Foundation Year Program, technical students

Introduction

In Oman, there have been calls to start teaching technical students English for specific purposes (ESP) courses to strengthen their ESP lexis as being knowledgeable about the ESP lexis can best prepare them for future professional commitments (Al-Husseini, 2005; Al-Issa, 2006). Hutchinson and Walters (1996) described ESP as the teaching of English for academic, vocational, or professional commitments. Learning English vocabulary for specific purposes is different from learning it for general academic purposes. Consequently, research on ESP has been attracting a great deal of attention in English language education over the past decade. Nevertheless, most studies have focused on learners' needs to study ESP at university level, while little attention has been paid to discover the relationship between the technical students' knowledge of the ESP lexis and their attitudes towards learning ESP in the Omani technical context (Al-Mahroqi, 2012). Therefore, the purpose of this research was twofold. It aimed to discover first the relationship between the technical students' knowledge of the ESP lexis and their attitudes towards learning ESP; and second, whether the Omani technical students' knowledge of ESP lexis is predictable and is affected by a combination of their attitudes to learning ESP, their

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gender, and their age. To achieve these purposes, several hypotheses needed to be tested (see Section "Research Questions and Hypotheses"). However, the author first considers how this issue was discussed in the literature.

Literature Review

In the Omani context, some reports issued by employers' associations have concurred that new technical graduates lack the English language communication skills needed for employment. This inhibits their abilities to contribute productively to achieving the work organization's objectives soon after assuming a post (Ministry of Manpower, 2013). It takes much time, effort, and cost to train and prepare them to sustain the linguistic demands of the workplace. In response, there are calls to design ESP courses that can best prepare technical learners for future professional commitments. Hutchinson et al. (1996) and Dudley-Evans and John (1998) described ESP as the teaching of English for academic, vocational, or professional commitments.

Despite extensive research on learning ESP, the literature exploring the correlation between these students' knowledge of ESP lexis and their attitudes towards learning ESP is still scarce due to the concentration on the learners' needs regarding ESP literacy. Therefore, research was extended to include whether the learners' conceptual and linguistic knowledge in particular ESP fields would be affected negatively or positively by their attitudes towards learning ESP (Dudley-Evans & John, 1998). Nation (2001) argued that most of the studies conducted to discover such a relationship are based on the idea of ESP vocabulary size development. Such a development may be positively or negatively affected by various factors, such as the students' attitudes towards learning ESP in general, and their gender, age, or educational specialization (Tsao, 2011). Concerning attitude towards ESP, Tsao (2011) claimed that students perceive a positive relationship between their knowledge of ESP and their attitudes towards learning it. Regarding students' gender effect on their knowledge, there is a belief in the Omani tertiary context that female students may increase their knowledge of ESP lexis more than their male peers from one year to the next. Llach and Galigo (2012) agreed with this result and attributed it to girls starting their adolescence earlier than boys, which boosts them to surpass their male peers.

However, no such studies have been conducted in Oman as it is a new context for ESP implementation. In addition, most of the conducted studies emphasized analysing technical learners' needs before designing ESP courses. Jiajing (2007, p. 98) saw that "analysing the specific needs of a particular learner group serves as the prelude to an ESP course design, because it determines the 'what' and 'how' of an ESP course". Dudley-Evans and John (1998) and Yong (2006) also call upon ESP course designers to address the learners' linguistic needs when planning technical materials.

Accordingly, this project aims to discover the correlation between the Omani technical students' conceptual and linguistic knowledge of ESP lexis and their attitudes towards studying ESP.

Research Questions and Hypotheses

To achieve this aim, this study measured two main constructs, that is, dependent variables: knowledge of the ESP lexis and attitudes towards learning ESP (more details are given in Section "Instruments"). The aim was to use a questionnaire to measure the correlation between these two dependent variables collect background data from the respondents, such as their gender, age group, and academic specialization (see Part 1 of the questionnaire in Appendix 2) to measure their effect on and prediction of the learners' knowledge of ESP lexis and attitude towards learning ESP. Table 1 is a list of the research questions and the hypotheses of measurement (H_1= operational hypotheses, H_0= null hypotheses).

Table 1

Study Domain and Variables

Study domain	Students at the Omani technical colleges
Dependent variables	Knowledge and attitude
Independent variables	Students' (1) gender, (2) age, and (3) specialization

Research Question 1: What is the relationship between the technical students' knowledge of the ESP lexis and their attitude towards learning ESP?

$H_{1:}$ There is a significant correlation between them (if students have better knowledge then they have a better attitude).

$H_{01:}$ There is no significant correlation between them (if students have similar knowledge then they have a similar attitude).

Research Question 2: What is the effect of students' gender on their knowledge of the ESP lexis?

$H_{2:}$ There is a significant effect (female students will have a better knowledge).

$H_{02:}$ There is no significant effect (both male and female students have similar knowledge).

Research Question 3: Does students' age group have an effect on their knowledge of the ESP lexis?

H_3: It has a significant effect (students then they will have a better knowledge).

H_{03}: It has no significant effect (both older and younger students have similar knowledge).

Research Question 4: Does students' specialization have an impact on their attitude towards learning ESP?

H_4: It has an impact.

H_{04}: It has no impact.

Research Question 5: Will participants' knowledge of ESP lexis be predictable based upon their attitude towards learning ESP, age and gender.

H_5: It will be predictable.

H_{05}: It will not be predictable.

Research Design

Oppenheim (2000) classified research design into various approaches; one of these is the scientific whereby the researcher conducts research to collect quantitative data through testing hypotheses and measuring correlations. This study is an example of such research and used a questionnaire as the data collection method (see Appendix 2). The questionnaire is one of the best methodologies for studying the correlations (Hutchinson & Walters, 1996; Dudley-Evans & John, 1998). Bryman and Bell (2011) described it as a large collection of numerical data to test human behaviours, knowledge, or attitudes in quantitative research fields.

The questionnaire comprised two constructs that aimed to assess participants' knowledge of the ESP lexis and their attitude towards learning ESP. Demographic details were also obtained in line with the scores on the two constructs (more details are given in Section "Instruments"). The dependent variables (students' attitude towards learning ESP and their knowledge of the ESP lexis), the independent variables (gender, age, and specialization), and the suitable statistical tests to be applied for each hypothesis are illustrated in the Table 2.

Table 2

The Dependent and Independent Variables Based on Hypothesis Tested

	Variables		Statistical test to be applied	
	Independent variable	Dependent variable	The data meet parametric requirements	The data do not meet parametric requirements
H_1	Knowledge and attitude		Pearson product-moment correlation coefficient	Spearman's rank order Correlation
H_2	Gender	Knowledge	Independent-samples *t*-test	Mann-Whitney U
H_3	Age	Attitude	One way between groups ANOVA	Kruskal-Wallis
H_4	Specialization	Attitude	One way between groups ANOVA	Kruskal-Wallis
H_5	Attitude, age, and gender	Knowledge	Hierarchical multiple regression	no non-parametric alternative

Instruments

The researcher used a questionnaire to collect data to enhance the study's feasibility within the constraints of the time and resources available and due to its suitability to provide the information sought with minimum expense (Robson, 2002). The questionnaire consisted of three parts (see Appendix 2). The first part elicited the students' demographical information (gender, age, specialization, and academic year), whereas the second and third parts measured the knowledge and attitude constructs respectively. Eliciting the personal data involved categorizing the participants into sub-groups. For example, in the "gender" variable, two options were provided (male or female); in "age", there were 19-23, 24-27, or 27-30 years old, while the options were Engineering, IT, and Business for "Specialization" and 1st, 2nd, or 3rd for the "Academic Year" variable.

The second part comprised 15-item multiple-choice knowledge test that elicited the definitions of certain technical words that students had learnt in their ESP courses. The test also examined the students' knowledge of how these words are constructed and used within different sentences. The knowledge items were elicited from the ESP vocabulary list that students were studying at the college (see *Technical Writing (1)* textbook) and from the exercises they were practising at the ESP classes with assistance of TheFreeDictionary Website at *http://www.thefreedictionary.com* to check the exact meaning of each lexical item. The knowledge of these ESP lexes ranges from knowledge of words association, cognates, and discourse knowledge to knowledge of how the word is constructed and used grammatically, morphologically, and phonologically (Nassaji, 2003). One of the choices students were offered was "I do not know" to minimize the number of lost answers. High scores indicate greater knowledge of ESP vocabulary whereas low scores indicate less knowledge.

For attitude, 15 items were devised to discover the students' opinions about learning ESP, including items to measure positive or negative attitudes. The negatively worded statements were scored in the opposite direction to the positive. Some of the items (Items 5, 10, and 14) were borrowed from a study conducted to measure the Saudi students' attitudes towards studying ESP (Abu-Rizaizah*, 2*005). Respondents were required to state their agreement on a 5-point Likert scale (1 = "Strongly disagree", 2 = "disagree", 3 = "neutral", 4 = "agree", 5 = "Strongly agree") as shown in Part 3 of the questionnaire (see Appendix 2). The Likert scale was chosen because it is "generally useful for getting at respondents' views, judgments, or opinions about almost any aspect of language learning" (Brown & Rodgers, 2002, p. 120). A high score indicated a positive attitude whereas a low score indicated a negative attitude.

Sample

Since this study aimed to identify Omani technical students' knowledge of the ESP lexis and their attitude

towards learning ESP, and since it was a small scale study, the process of random sampling was not possible. Accordingly, a convenience sampling method was applied to collect data. The researcher distributed the questionnaires among 48 participants (24 males and 24 females) aged between 24 and 27 years old. These participants were studying in technical colleges in Oman; 16 were specialized in Engineering, 16 in Information Technology (IT), and the same number in Business Studies. They had enrolled in a foundation year program, where they had studied English intensively and were studying ESP alongside their specialisation.

Procedures

The questionnaires were administered in person with the help of the ESP lecturers at the colleges. Consent (see Appendix 1) was obtained from both the college administration and the students themselves. All participants were guaranteed total confidentiality and anonymity. They were asked to complete the questionnaires independently, under examination conditions, in order to minimize the response bias and to ensure high response rates and sampling accuracy (Oppenheim, 2000). Finally, the data were coded into SPSS (Statistical Package for Social Science) software (version 21) and analysed based on the predetermined hypotheses (Oppenheim, 2000). SPSS is the best tool for statistical analysis in the social sciences, and its features match the quantitative requirements of the current research (Field, 2009).

Reliability and Validity

To ensure their consistency with the aims of the study, the reliability and validity of the measuring instruments were tested.

Reliability. In this study, to ensure the reliability of the questionnaire, both the overall knowledge and the overall attitudinal scales were subjected to the Cronbach's Alpha test. The results showed that the Cronbach's Alpha coefficient for overall knowledge items was 0.878 (see Table 3) and for attitude was 0.959 (see Table 4), both of which are higher than the recommended value of 0.70 to claim internal consistency. In addition, the Item-total Statistics Tables for knowledge and attitude items (see Appendix 3, Parts 1 & 2) showed no significant change and no negative correlations through the removal of any items. These all suggested both scales obtained in this investigation demonstrated excellent internal consistency reliability (Pallant, 2007).

Table 3

Reliability Statistics—Knowledge

Cronbach's Alpha	Cronbach's Alpha based on standardized items	No. of items
0.878	0.879	15

Table 4

Reliability Statistics—Attitude

Cronbach's Alpha	Cronbach's Alpha based on standardized items	No. of items
0.959	0.970	15

Validity. Validity of the scales is concerned with ensuring that the scales measure what they are supposed to measure (Pallant, 2007). To ensure the content validity of this study's employed instruments, the questionnaire was sent to three experts who teach ESP in the technical colleges. They evaluated the content of the questionnaire and identified the need for clearer vocabulary. Thus, the wording in some of the scale items was changed to one student who is more familiar with. There was no opportunity to conduct a pilot study due to time constraints.

Ethical Considerations

Ethical guidelines are vital to help researchers carry out their research projects (Yee & Andrews, 2006). This study involved issues of access and acceptance, informed consent, confidentiality and anonymity of participants, and avoidance of harm (Punch, 1994).

Regarding gaining access to the site of the study and being accepted by the organization to carry out the fieldwork required, an ethical approval form was obtained from both the colleges' administrations and the students (Cohen, Manion, & Morrison, 2007). Additionally, having worked in the colleges for several years and the good relationship with the staff of the colleges also aided the author's access and acceptance. Regarding gaining informed consent, before the beginning of this study, the participants were given the required information about the research to seek their formal and written agreement to take part in the study (Cohen et al., 2007). The title page of the questionnaire clearly stated that participation in the research was voluntary and that participants were free to withdraw from the research at any point (BERA, 2011). For confidentiality and anonymity of participants, in this study, the participants were assured that there will be no mention of their names or their college when reporting the results. Also, each participant was given a unique symbol consisting of two parts (i.e., ENG5 and BUS3) to identify the student's department and his/her order in the analysis plan. Al-Bedwawi (2012) applied such identification and found it helped comparing between the responses made.

For avoidance of harm, participants were informed that the data gathered would be used solely for the research purpose and would not be revealed to anyone outside this framework and their participation in the study would result in no harm to them and would have no future consequences on their study prospects at the colleges.

Results and Findings

This part provides a detailed analysis of the study findings and shows if they support or reject the statistical significance of the tested hypotheses. However, it is first advisable to present how the normality of the applied measuring scales, namely, knowledge and attitudes, was tested (Pallant, 2007).

Normality Tests

Field (2009) recommended using the Kolmogorov-Smirnov test and the Shapiro-Wilk test to check the statistics of normality; this includes the degrees of freedom and the significance values of the test (Pallant, 2007). Testing the normality (1) "assures whether the data distribution was normal and symmetrically bell-shaped or highly skewed" and (2) determines whether the researcher would use parametric (which assumes a normal data distribution) or non-parametric tests (because of the abnormality), or the need to use a transformation in data analysis (Pallant, 2007). For this study, the whole sample was tested for normality on all continuous variables using the abovementioned tests.

Although Field (2009) considered the Shapiro-Wilk test more accurate when testing normality as it is more appropriate for small sample sizes (< 50 samples), as is shown in Tables 5 and 6, both the Kolmogorov-Smirnov and Shapiro-Wilk tests indicated a significant result (*sig.* = 0.000, which is < 0.05) for both "total knowledge score" and "total attitude score", suggesting that the data significantly deviated from a normal distribution (to achieve a normal data distribution, sig. should be ≥ 0.05).

Table 5

Tests of Normality for Total Knowledge Score

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	*Sig.*	Statistic	df	*Sig.*
Total knowledge score	0.183	48	0.000	0.841	48	0.000

Note. a. Lilliefors Significance Correction.

Table 6

Tests of Normality for Total Attitude Score

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	*Sig.*	Statistic	df	*Sig.*
Total attitude score	0.249	48	0.000	0.745	48	0.000

Note. a. Lilliefors Significance Correction.

In addition, using the output of a normal Q-Q plot of both the "total knowledge score" and "total attitude score" showed that the data were not normally distributed as the data points stray away from the line in an obvious non-linear fashion (see Figures 1 and 2).

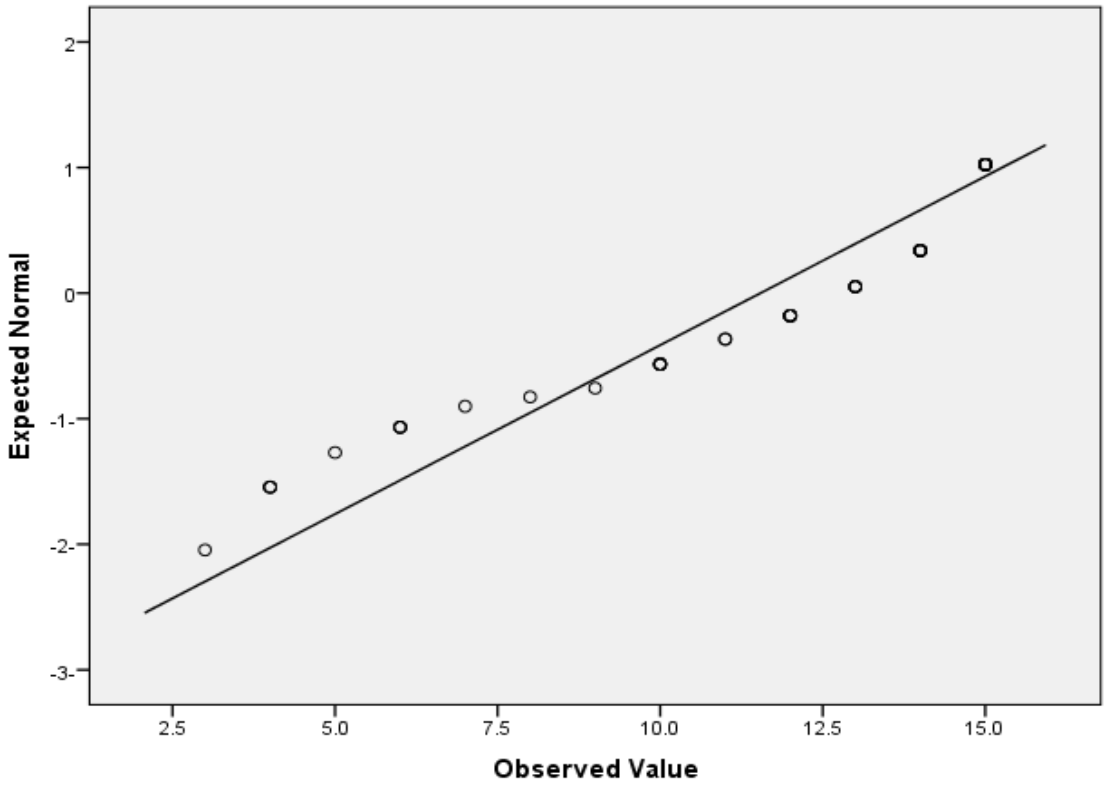


Figure 1. Normal Q-Q plot of total knowledge score

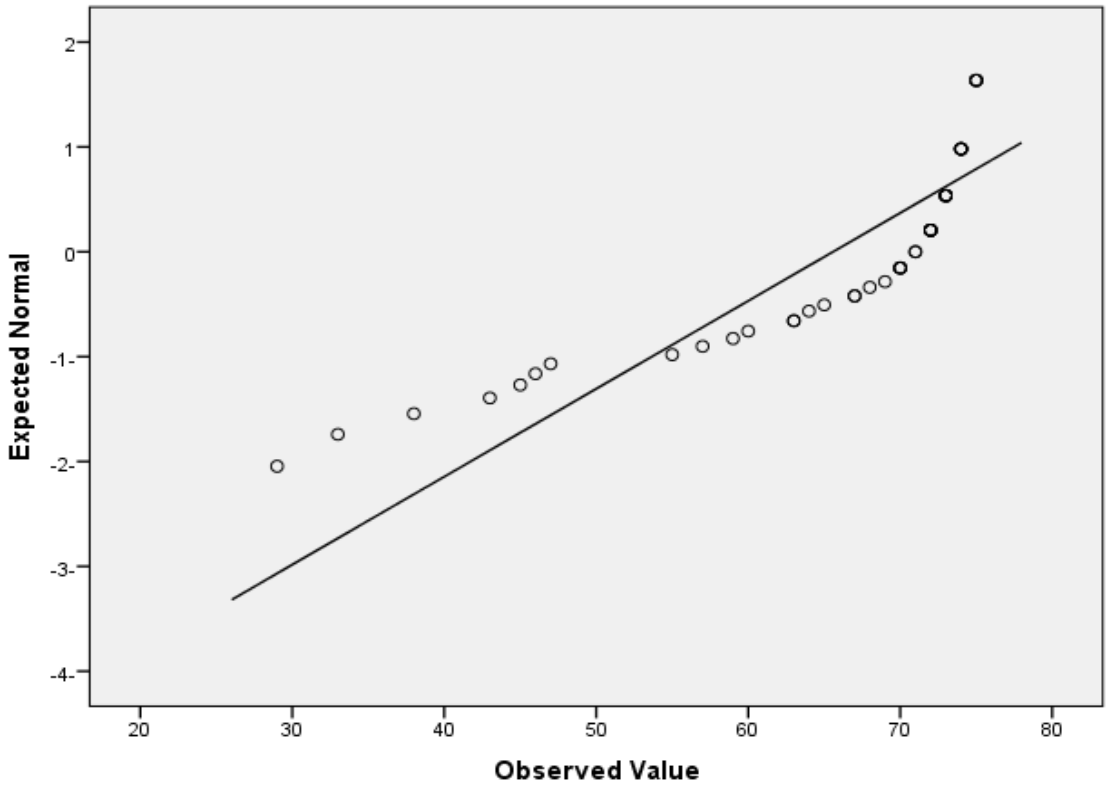


Figure 2. Normal Q-Q plot of total attitude score

One reason that the data were not normal was a high degree of negative skewness (see Appendix 3, Parts 3 & 4) indicating that more students scored highly in the ESP lexis knowledge and test, which led to a more positive overall attitude to learning ESP.

So, even though parametric tests are more powerful and more accurate for data analysis than non-parametric ones (Rockinson-Szapkiw, 2013), the abovementioned results left no possibility to transform the data because of the severe violation of normality. Nonetheless, it indicated using the non-parametric tests to test the hypothesis, which will be illustrated in the following part.

Hypotheses Testing

This part demonstrates the results of the hypotheses testing.

The first hypothesis (Correlation: H_1 = Accepted, H_{01} = Rejected). Hypothesis One involves the association between knowledge and attitude scales to find whether there is a significant correlation between the technical students' knowledge of the ESP lexis and their attitude towards learning ESP. As the data do not meet parametric requirements because of a non-normal data distribution, then a nonparametric correlations test, specifically, a one-tailed statistical significance Spearman's rank order correlation test was applied. The test was one-tailed because a directional difference in the means was being looked for rather than just a difference.

The results (see Table 7) indicated that there was a strong positive correlation, based on Cohen's (1988, as cited in Pallant, 2007) criteria between the two variables as (r = 0.803, N = 48, p < 0.005), which was statistically significant with high scores in the knowledge of the ESP lexis associated strongly with the students' total positive attitudes towards learning ESP. This meant that it was possible to accept H_1 (there is a significant correlation between the two variables), and to reject the null hypothesis H_{01} (there is no significant correlation).

Table 7

Spearman's Rank Order Correlation

		Total knowledge score	Total attitude score
Total knowledge score	Spearman's correlation coefficient	1.000	0.803**
	Sig. (one-tailed)		0.000
	N	48	48
Total attitude score	Spearman's correlation coefficient	0.803**	1.000
	Sig. (two-tailed)	0.000	
	N	48	48

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

The second hypothesis (Gender effect: H_2 = Accepted, H_{02} = Rejected). Hypothesis Two is concerned with testing whether a student's gender has a significant effect on their knowledge of the ESP lexis. To accept or reject this hypothesis, the non-parametric Mann-Whitney U test was applied as the data did not meet the parametric requirements because of the normality violation. The participants (N = 48) were divided into two groups according to their gender, with 24 in each group.

Table 9 shows that the females scored better than males as their mean rank is 35.6 compared with 13.4 for the males. This result is confirmed by Table 8, which indicates that (U = 21.500, and high significance level p = 0.000 < 0.005).

Table 8

Non-Parametric Tests, Mann-Whitney U Test: Test Statistics

Test statistics[a]	
	Total knowledge score
Mann-Whitney U	21.500
Wilcoxon W	321.500
Z	-5.582
Asymp. *Sig.* (two-tailed)	0.000

Note. a. Grouping variable: Gender.

Table 9

Non-Parametric Tests, Mann-Whitney U test: Mean Rank

Ranks				
	Gender	*N*	Mean rank	Sum of ranks
Total knowledge score	Male	24	13.40	321.50
	Female	24	35.60	854.50
	Total	48		

The effect size (r) was calculated using the technique described in Pallant (2007) and can be considered a medium effect using the Cohen (1988, as cited in Pallant, 2007) criteria. Thus, according to the abovementioned findings, students' gender significantly affected their knowledge of the ESP lexis which means that H_2 hypothesis is accepted and the null hypothesis H_{02} is rejected.

The third hypothesis (Age group effect: H_3 = Accepted, H_{03} = Rejected). Hypothesis Three stated that older students had a more positive attitude towards learning ESP. Thus, a Kruskal-Wallis H test using SPSS was conducted. This test is the non-parametric test equivalent to the one-way ANOVA test and is used here as

this study's data were not normally distributed. It differs from the non-parametric Mann-Whitney U test in that the former is used to determine whether there were any statistically significant differences between the distributions of three or more independent groups whereas the latter is used to differentiate between two groups. Participants were divided into two groups according to their age (Group 1: 19-23 yrs and Group 2: 24-27 yrs) because no respondents were from Group 3: 27-30 yrs.

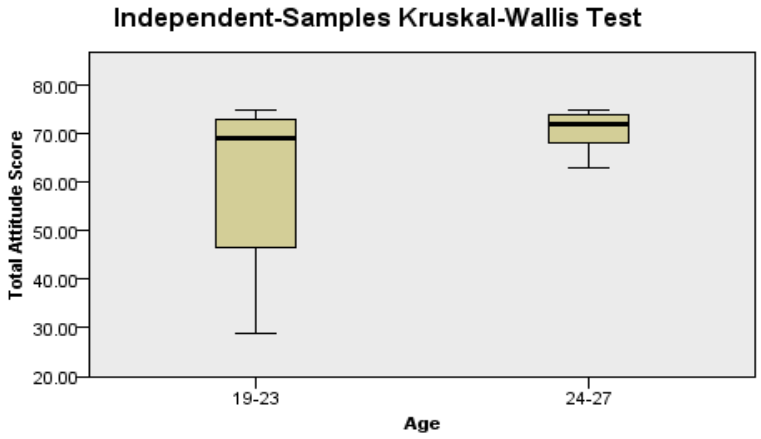
Table 10 shows that the test was statistically significant ($p = 0.049 < 0.05$), which meant rejecting the null hypothesis. This result was confirmed by Figure 3, which presented the degrees of freedom $\chi^2(3) = 3.868$, the significance level $p = 0.049$, and the shapes of the distributions, where it was hard to identify the degree of similarity.

Table 10

Non-Parametric Tests, Kruskal-Wallis H test: Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Total Attitude Score is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.049	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.



Total N	48
Test Statistic	3.868
Degrees of Freedom	1
Asymptotic Sig. (2-sided test)	.049

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because there are less than three test fields.

Figure 3. Non-Parametric Tests, Kruskal-Wallis H test: Hypothesis test summary.

In addition, the mean rank of the attitude scores for each group, as illustrated in Table 11, showed a similar result. With a median rank of 69.00 for Group 1 and 72.00 for Group 2, it can be inferred that the older students were, the more positive was their attitude towards learning ESP. Such a result is confirmed by Figure 3, which illustrates the means plot of total attitude score and age.

Table 11

Non-Parametric Tests, Kruskal-Wallis H test: Means Report-Median

Age	Total attitude score
19-23 yrs	69.00
24-27 yrs	72.00
Total	71.00

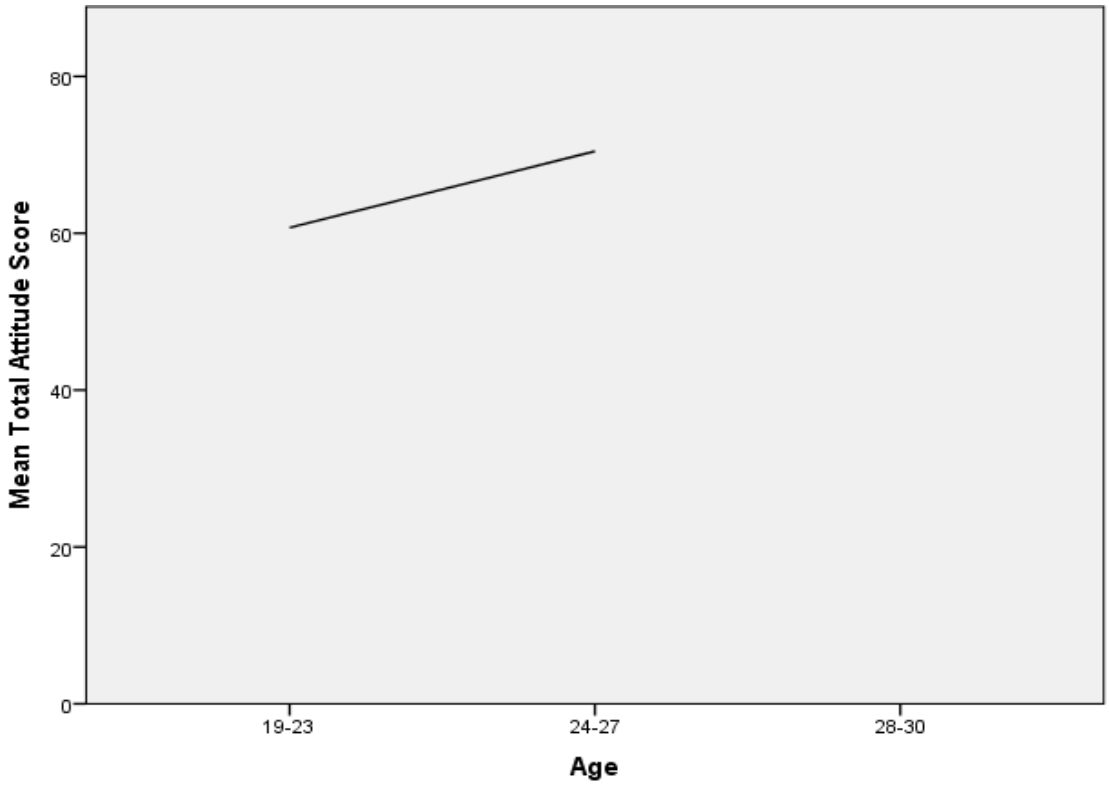


Figure 4. Means plot of total attitude score and age.

The fourth hypothesis (Specialization effect: H_4 = Rejected, H_{04} = Accepted). The speciality of participants was assumed to affect their attitude towards learning ESP. This hypothesis bears resemblances to the previous one, leading to the same Kruskal-Wallis H test as participants were from three different major specialities, namely, Engineering, Business, and IT. The outcome results are represented below in Tables 12 and 13 and Figures 5 and 6.

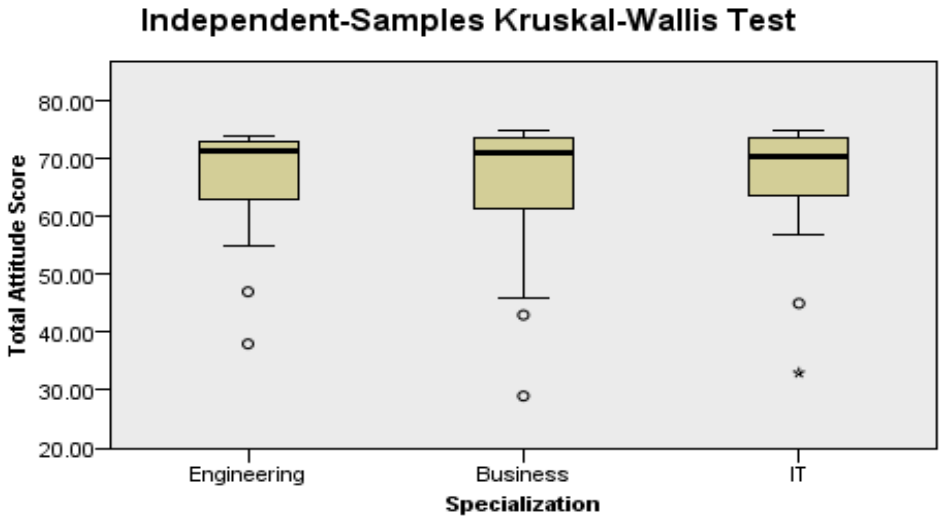
As Table 12 shows that the test was not statistically significant ($p = 0.943 > 0.05$), which means that H_4 was rejected and the null hypothesis H_{04} was retained. This result is confirmed by Figure 5, which presents the degrees of freedom $\chi^2(3) = 2$, the significance level $p = 0.943$ and the shapes of the distributions, which are not too dissimilar, although with so few subjects, it can be hard to tell.

Table 12

Non-Parametric Tests, Kruskal-Wallis H test: Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Total Attitude Score is the same across categories of Specialization.	Independent-Samples Kruskal-Wallis Test	.943	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.



Total N	48
Test Statistic	.118
Degrees of Freedom	2
Asymptotic Sig. (2-sided test)	.943

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

Figure 5. Non-Parametric Tests, Kruskal-Wallis H test: Hypothesis test summary.

The report table, Table 13, indicated a similar outcome. It contained the medians of the different levels of speciality (the independent variable). With a median rank of 71.500 for the Engineering group, 71.00 for Group 2, and 70.50 for the IT group, it can be concluded that students, regardless of their specialization, had an approximately similar attitude towards learning ESP. Such a result is represented by Figure 6, which illustrates the means plot of total attitude score and age.

Table 13

Non-Parametric Tests, Kruskal-Wallis H Test: Means Report-Median

Specialization	Total attitude score
Engineering	71.50
Business	71.00
IT	70.50
Total	71.00

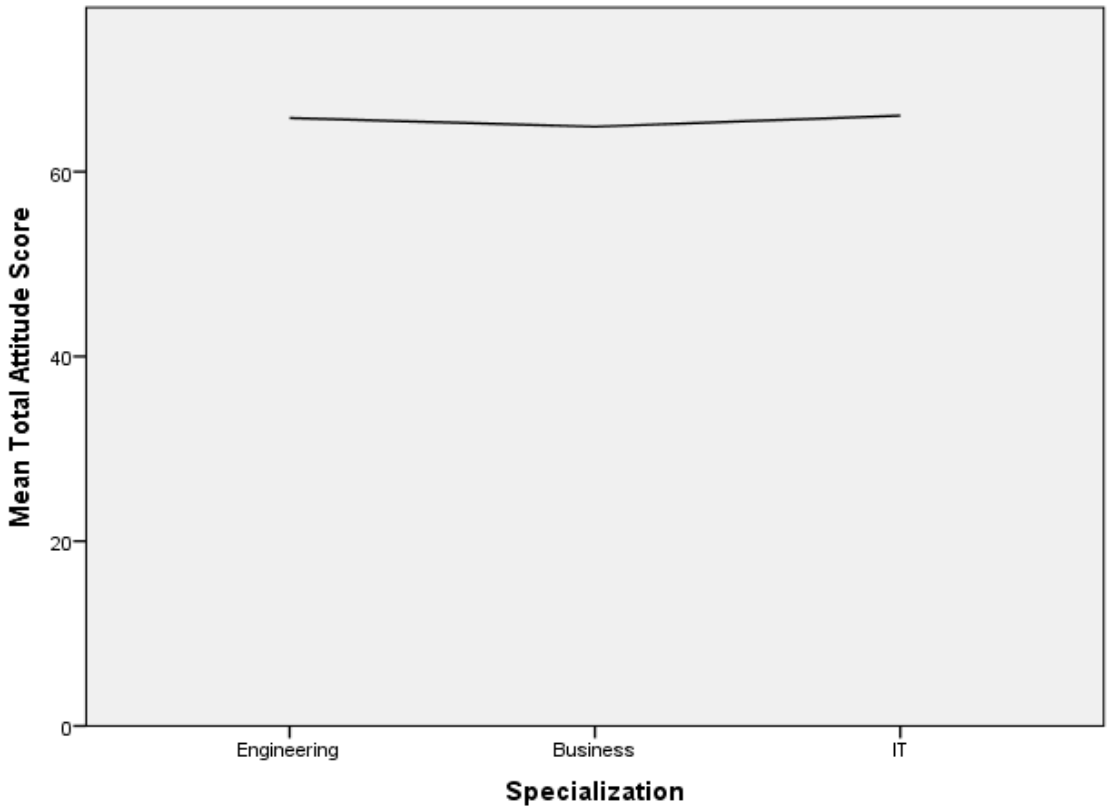


Figure 6. Means plot of total attitude score and speciality.

The fifth hypothesis (Regression: H_5 = Accepted, H_{05} = Rejected). The last hypothesis of this study was regarding whether the participants' knowledge of the ESP lexis was predictable based upon their attitude towards learning ESP, their age, and their gender. Since this study aimed to test whether such multiple variables could have such an impact, the Multiple-Regression test was the suitable solution to be applied. Therefore, independence of cases, linearity, and homoscedasticity ensured that they were free of any violation. It is also important that the independent variables do not display multi-collinearity. In addition, in order to generate generalizable results, Stevens (1996, as cited in Pallant, 2007) recommended 15 subjects per predictor. There were more than 30 subjects in the sample in question, which is reasonable given the size of the enquiry.

Accordingly, the results of this study showed that the adjusted *R Square* value was 0.838 (see Table 14) meaning that the model generated predicts more than 83% of the variance in the dependant variable. This model is statistically significant since ($p < 0.0005$) (see Table 15). There was also no clear independence of residuals, as assessed by a Durbin-Watson statistic of 1.4 which is close to 2.00 (see Table 14). This result was

confirmed by the Normal P-P Plot of the Regression Standardized Residual chart (see Figure 7), which showed a fairly straight line of points and no clear pattern to residuals in the scatterplot, and by the Regression Standardized Residual Histogram (see Figure 8), which showed a similar result.

Table 14

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	0.921[a]	0.848	0.838	1.497	0.848	82.056	3	44	0.000	1.398

Notes. a. Predictors: (Constant), age, gender, total attitude score; b. dependent variable: Total knowledge score.

Table 15

ANOVA[a]

Model		Sum of Squares	df	Mean Square	*F*	*Sig.*
1	Regression	551.366	3	183.789	82.056	0.000[b]
	Residual	98.551	44	2.240		
	Total	649.917	47			

Notes. a. Dependent variable: Total knowledge score; b. Predictors: (Constant), age, gender, total attitude score.

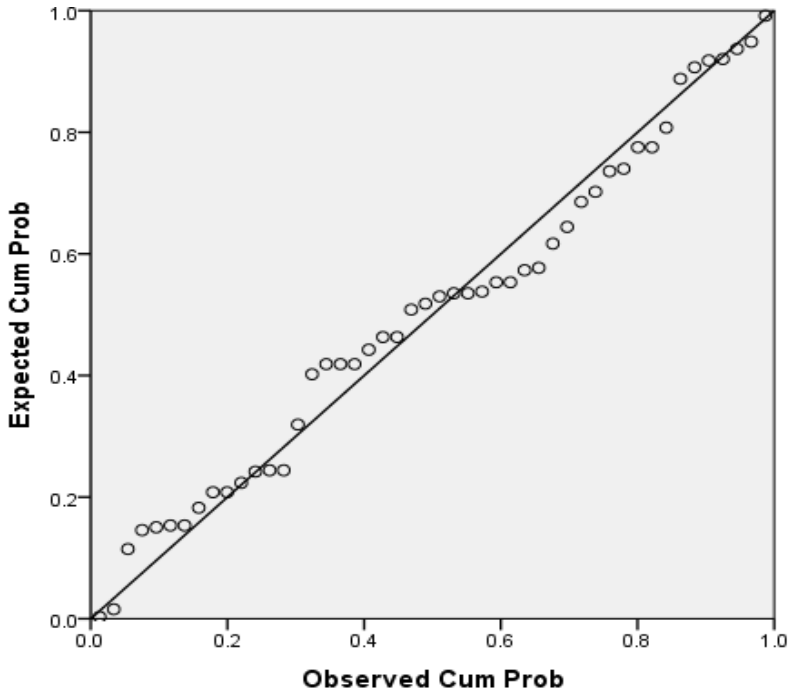


Figure 7. Normal P-P plot of regression standardized residual dependent variable: Total knowledge score.

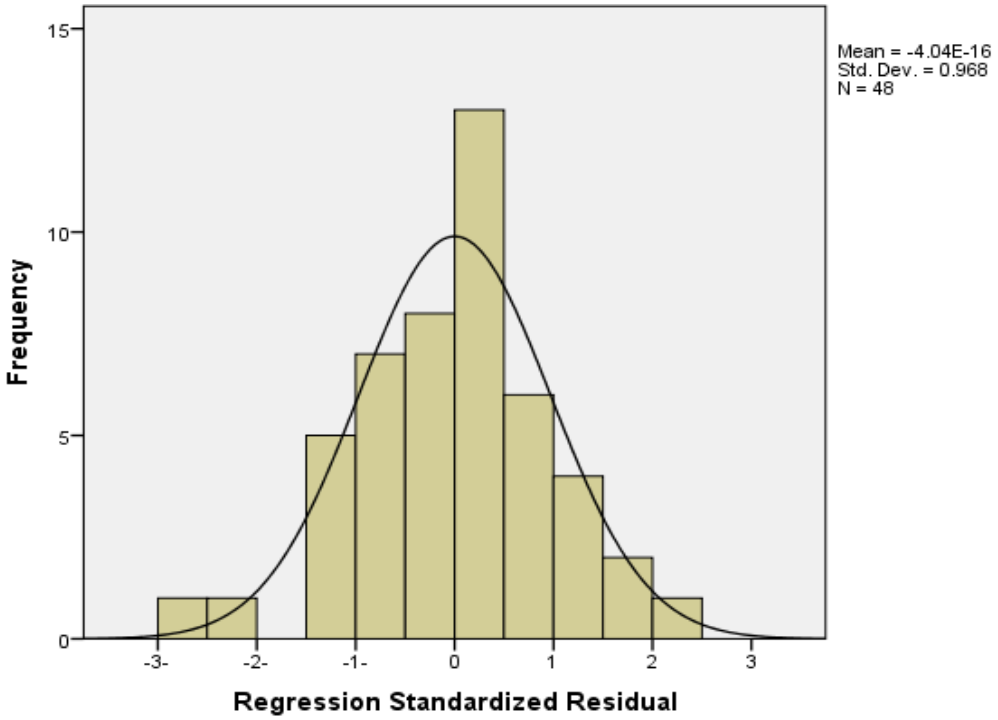


Figure 8. Dependent variable: Total knowledge score.

In addition, to make sure that independent variables were not multi-collinearated, two measures of this were found, namely, tolerance, a measure of how much of the variability of one independent variable is not explained by the other independent variables, and the variance inflation factor (VIF), which is the inverse of tolerance. Tolerance must be greater than 0.1 (Pallant, 2007) and is still a concern if it is less than 0.2 (Field, 2009). If the tolerance value is less than 0.1—which is a VIF of greater than 10—there might be a co-linearity problem as suggested by Pallant (2007) and Field (2009). As can be seen in Table 16, in this example, all the tolerance values were greater than 0.1 (the lowest was 0.510) and VIF values between 1.334 and 1.960 were found, which are less than the maximum of 10. Accordingly, we can be fairly confident there is no problem with co-linearity in this particular data set.

Table 16

Coefficients[a]*: Beta Values*

Model		Unstandardized coefficients		Standardized coefficients	*T*	*Sig.*	Collinearity statistics	
		B	Std. error	Beta			Tolerance	VIF
1	(Constant)	-6.070	1.231		-4.930	0.000		
	Total attitude score	0.169	0.026	0.543	6.602	0.000	0.510	1.960
	Gender	3.245	0.551	0.441	5.891	0.000	0.615	1.625
	Age	1.101	0.499	0.150	2.206	0.033	0.749	1.334

Note. a. Dependent variable: Total knowledge score.

Regarding the contribution of each independent variable in the prediction of the knowledge variable, Beta values were considered. Standardized coefficients show that total attitude (beta = 0.543, $p < 0.0005$) made a larger significant contribution to explaining and predicting the dependent variable than either the students' age (beta = 0.150, $p < 0.0005$), indicating that it made the lowest contribution, or gender (beta = 0.441, $p < 0.0005$)

(see Table 18). All of these variables are statistically significant ($p < 0.0005$); thus, they gave a better prediction that the chance the null hypothesis (H_{05}) could be rejected and hypothesis (H_5) was accepted. Hence, we may say that knowledge of the ESP lexis might be predictable from a combination of the students' attitude towards learning ESP, their age, and their gender. This, of course, is linked to the fact that there is such a strong correlation between knowledge of ESP vocabulary and total attitude towards learning ESP.

Discussion

This section discusses the findings in relation to the underlying theory, evaluates the methods used to identify the weakness, and suggests modifications. First, many studies have argued that the acquisition of specialized vocabulary in learning (ESP) is a primary goal and that the more ESP lexis a learner knows, the larger his ESP knowledge is and the more positive his attitude towards learning ESP would be (Hutchinson & Walters, 1996). However, such a correlation might be influenced by several factors, such as the learner's gender, age, and academic specialisation. Thus, the intention of this study was to examine the existence of such interrelationships and such effects.

Consequently, the study first examined the correlation between the technical students' knowledge of the ESP lexis and their attitude towards learning ESP. The results identified a strong relationship between people's knowledge and attitudes in this field and therefore people who are more knowledgeable (gain high score) of ESP lexis have more enthusiasm to learn ESP.

Clearly, a positive attitude is crucial for language, especially ESP, learners because it is one of the key factors driving language-learning success (Dörnyei, 2001a). Without sufficient positive attitude, individuals cannot accomplish long-term goals (Dörnyei, 2001b). A good learning of new ESP vocabulary will be possible as long as there is an environment that provides adequate level of good beliefs. Such an environment will be achieved by giving students the opportunity to practise these ESP lexes and through either intrinsic or extrinsic motivation (Bangs, 2003).

On the other hand, and regarding the issue of gender's differences with respect to their receptive ESP vocabulary knowledge, the results of this small-sample size study revealed significant differences between male and female learners. Females showed higher vocabulary gains than males, which means that they were found to significantly incorporate more ESP words into their lexicons than their male peers. This result concurs with what Garcia Hoz (1977, as cited in Llach & Galigo, 2012) concluded for vocabulary acquisition, where girls were found to progress at a faster rate than boys. Girls start their adolescence earlier than boys and it is at this stage when they start getting better and even surpass their male peers. However, Sunderland (2010) indicated that this type of dissimilarities is "tendencies rather than straightforward, definitive conclusions" (p. 2). Therefore, further studies with larger samples are required to confirm or reject such an effect of student's gender on their knowledge of ESP lexis.

Also, in the conducted study, the older students, regardless of their gender, were more knowledgeable, therefore, "it seemed that after a certain amount of practicing and using ESP lexis, students knew more how to use strategies for acquiring new ESP words which enhance their attitudes towards learning these vocabulary" (Atay & Ozbulgan, 2007, p. 47). In contrast, participants with a limited ESP vocabulary could rely only on their guesses which consumed a lot of their time and efforts and therefore demotivated them to learn (Akbari, 2011). The author agrees with Jackson and Bilton (1994) who, in their research about the Omani undergraduates, attributed the shortage of ESP lexis knowledge among young learners to restricting their exposure to English to

only a formal classroom setting. This finding reflects the common understanding that attitude and knowledge are two associated variables, thus highlighting the need for further investigation of this issue.

Notwithstanding the correlation of the abovementioned variables, this study found hardly any effect of the students' specialty on their attitudes towards learning ESP. It made no significant difference regarding either positive or negative attitudes. One reason for the failure to reject the null hypothesis might be due to, as Stevens (1996, as cited in Pallant, 2007) argued, the effect size. Cohen (1990, as cited in Field, 2009) argued that a null hypothesis cannot be rejected when the effect cannot be deducted because of the small sample size (in this study, $N = 48$). It will be better if there are more respondents or a big enough sample. A larger sample with a greater age range would give more reliable results.

Despite the absence of a speciality effect on students' attitude towards learning ESP, attitude towards learning ESP and age group are strong predictors of the participants' knowledge of the ESP lexis. This is in line with other related studies in this area, such as (Morgan & Rinvolucri, 2004), which have highlighted the strong relationship between people's knowledge and their feelings. As explained earlier, such a relation might be due to the strong association between the students' knowledge of the ESP lexis and their attitudes towards learning ESP. Furthermore, the older the students were, the more knowledgeable they might be about the ESP lexis due to their greater experience. All of these factors could help in predicting the ESP lexis knowledge of students.

Conclusion and Recommendations

This small scale study examined the relationship between the Omani technical students' knowledge of ESP lexes and attitudes towards learning ESP. Though it confirmed this positive relation between people's knowledge and their feelings, several recommendations are proposed. For example, it would be interesting to compare these results with the findings from the other Omani higher education institutions in order to see if such a strong correlation is still remarkable. Concerning the technical education context, it seems that there is a need for a good instructional design process that offers to enhance the world of education. In addition, the study shows that technical students' attitude towards learning ESP is another issue that must be resolved as it negatively affects improving the students' knowledge of ESP lexes. Finally, despite this study's limitations, it still provides useful information and suggests indications for further future research within relative domains.

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Appendices

Appendix 1: Participant consent form

Title of research study: Students' knowledge of and attitudes towards learning ESP lexical phrases in the Omani Technical Colleges

Welcome:

Thank you for allocating time to take part in this research project. Before you decide it is important for you to understand why this research is being done and what it will involve. Please take time to read the following information.

What is the purpose of the project?

The researcher aims to explore what are the Students' Knowledge and attitudes towards learning ESP lexical phrases in the Omani Technical Colleges

Why have I been chosen?

You have been chosen to kindly take part in this project as you are studying ESP courses in one of the Omani Technical Colleges

Do I have to take part?

All what you have to do is to answer some questions in a questionnaire. Your participation is entirely voluntary, so please do not feel obliged to take part. Refusal will involve no penalty whatsoever and you may withdraw from the study at any stage without giving an explanation to the researcher. However, it is important that the responses you provide are your own and not shared views of other colleagues.

Will all my details be kept confidential?

You should be aware that all the personal information is entirely confidential. The data collected will be anonymised and will be analysed thoroughly to come into some findings.

I confirm that I have read and understood the abovementioned information. I understand that my participation is voluntary and that I am free to withdraw at any time.

I agree to take part in the above study

I do not agree to take part in the above study

Should you have any enquiries, I would be happy to answer them at the email address: prince_801@hotmail.com

Appendix 2: Questionnaire

This questionnaire is made of three parts, demographic information, Students' Knowledge of ESP lexical phrases, and Students' Attitudes towards learning ESP lexical phrases in the Omani Technical Colleges. Please answer each part accordingly.

Part 1

Personal details: Please circle the appropriate answer

No.	Variable	Choices		
1.	Gender	Male	Female	-
2.	Age group	19-23	24-27	27-30
3.	Specialization	Engineering	Business	IT
4.	Academic year	First	Second	Third

Please move to Part 2 in the following page

Part 2

Students' knowledge of the ESP lexis

No.	Question	A	B	C	D
1.	To make or process (a raw material) into a finished product, especially by means of a large-scale industrial operation.	Manufacture	Export	Import	I do not know
2.	The act or process of separating or reducing something into its constituent parts.	Enlargement	Resolution	Production	I do not know
3.	Relating to an application that can combine text, graphics, full-motion video, and sound into an integrated package.	Computer	Design	Multimedia	I do not know
4.	To save (documents, data, etc.) in a format usable by another application program.	Transport	Import	Export	I do not know
5.	Close attention to minimize risk.	Caution	Safety	Overall	I do not know
6.	A unit of length equal to one hundredth (10^{-2}) of a meter	Centimetre	Millimetre	Kilometre	I do not know
7.	A room or building equipped for scientific experimentation or research.	Laboratory	Library	Workshop	I do not know
8.	A person employed in a laboratory, technical college, or scientific establishment to do practical work.	Client	Technician	Mechanic	I do not know
9.	A device that applies electric current in proper sequence to the spark plugs of an engine.	Worker	Receiver	Distributor	I do not know
10.	I will graduate this year with…	B.tech.	B.sc.	Ba.	I do not know
11.	Numerical data.	Statistics	Charts	Maps	I do not know
12.	…is an important component of fibre optics.	Copper	Fiberglass	Wood	I do not know
13.	Use a …for tightening or loosening screws.	Hammer	Built	Screwdriver	I do not know
14.	Having great influence more than expected.	Powerless	Power	Powerful	I do not know
15.	A notice, such as a poster or a paid announcement in the print, broadcast, or electronic media, designed to attract public attention or patronage.	Email	Advertisement	Test	I do not know

Please move to Part 3 in the following page

Part 3

Students' attitudes towards learning ESP in the Omani Technical Colleges

No.	Statement	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1.	Learning ESP lexis increases my motivation to study in the college.					
2.	My knowledge of ESP lexis makes my English vocabulary retention longer.					
3.	ESP lexis is difficult to understand.					
4.	Learning ESP lexis improves my English communication skills.					
5.	Learning ESP lexis is important for my field of studies.					
6.	Learning ESP lexis is useful for furthering my technical education.					
7.	Learning ESP lexis enhances my linguistic accuracy.					
8.	Learning ESP lexis rises my confidence to earn good marks.					
9.	Learning ESP lexis is boring.					
10.	My knowledge of ESP lexis helps me learn ESP more efficiently.					
11.	Learning ESP lexis enhances my ability to speak fluently.					
12.	Learning ESP lexis motivated me to engage in more oral activities in the future.					
13.	Learning ESP is not suitable for my field of study.					
14.	Learning ESP through learning ESP lexis will enhance my future career.					
15.	I like to learn ESP through learning ESP lexis.					

This questionnaire requires your opinion about learning ESP in the Omani Technical Colleges. Please rate your opinion based on a 5-points Likert scale:

1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Disagree

Thank you for your time.

Appendix 3:

1. Reliability: Knowledge

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
To make or process (a raw material) into a finished product, especially by means of a large-scale industrial operation	9.73	12.287	.501	.	.870
The act or process of separating or reducing something into its constituent parts	9.92	11.652	.580	.	.866
Relating to an application that can combine text, graphics, full-motion video, and sound into an integrated package	9.77	12.606	.345	.	.877
To save (documents, data, etc.) in a format usable by another application program.	9.88	11.473	.659	.	.862
Close attention or vigilance to minimize risk	9.83	11.929	.532	.	.869
A unit of length equal to one hundredth (10-2) of a meter	9.71	12.849	.310	.	.878
A room or building equipped for scientific experimentation or research	9.79	12.381	.408	.	.875
a person employed in a laboratory, technical college, or scientific establishment to do practical work	9.83	11.716	.604	.	.865
A device that applies electric current in proper sequence to the spark plugs of an engine.	9.94	11.592	.592	.	.865
Numerical data	9.71	11.913	.682	.	.862
…… is an important component of fibre optics	9.75	11.936	.608	.	.865
Use a …….for tightening or loosening screws	9.71	11.956	.664	.	.863
Having great influence more than expected	9.71	11.956	.664	.	.863
A notice, such as a poster or a paid announcement in the print, broadcast, or electronic media, designed to attract public attention or patronage.	9.77	12.266	.465	.	.872

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
10.54	13.828	3.719	15

1. Reliability: Attitude

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Learning ESP lexis increases my motivation to study in the college	61.15	121.787	.916	.	.953
My knowledge of ESP lexis makes my English vocabulary retention longer	61.13	120.197	.950	.	.952
ESP lexis are difficult to understand	61.54	115.147	.895	.	.954
Learning ESP lexis improves my English communication skills	61.33	118.738	.863	.	.954
Learning ESP lexis is important for my field of studies	60.83	133.887	.726	.	.959
Learning ESP lexis is useful for furthering my technical education	61.10	122.095	.922	.	.953
Learning ESP lexis enhances my linguistic accuracy	61.13	121.686	.920	.	.953
Learning ESP lexis rises my confidence to earn good marks	61.98	143.297	-.086-	.	.973
Learning ESP lexis is boring	61.58	115.355	.863	.	.955
My knowledge of ESP lexis helps me learn ESP more efficiently	60.73	135.308	.821	.	.959
Learning ESP lexis enhances my ability to speak fluently	61.15	121.787	.916	.	.953
Learning ESP lexis motivated me to engage in more oral activities in the future	61.10	122.095	.922	.	.953
Learning ESP is not suitable for my field of study	61.58	115.355	.863	.	.955
learning ESP through learning ESP lexis will enhance my future career	60.73	135.308	.821	.	.959
I like to learn ESP through learning ESP lexis	61.10	122.095	.922	.	.953

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
65.58	142.248	11.927	15

1. Tests of Normality: Knowledge

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total Knowledege Score	48	3	15	11.54	3.719	-.940-	.343	-.342-	.674
Valid N (listwise)	48								

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total Knowledege Score	48	-.940-	.343	-.342-	.674
Valid N (listwise)	48				

Tests of Normality: Knowledge Kolmogorov-Smirnov[a] - Shapiro-Wilk.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Total Knowledege Score	48	100.0%	0	0.0%	48	100.0%

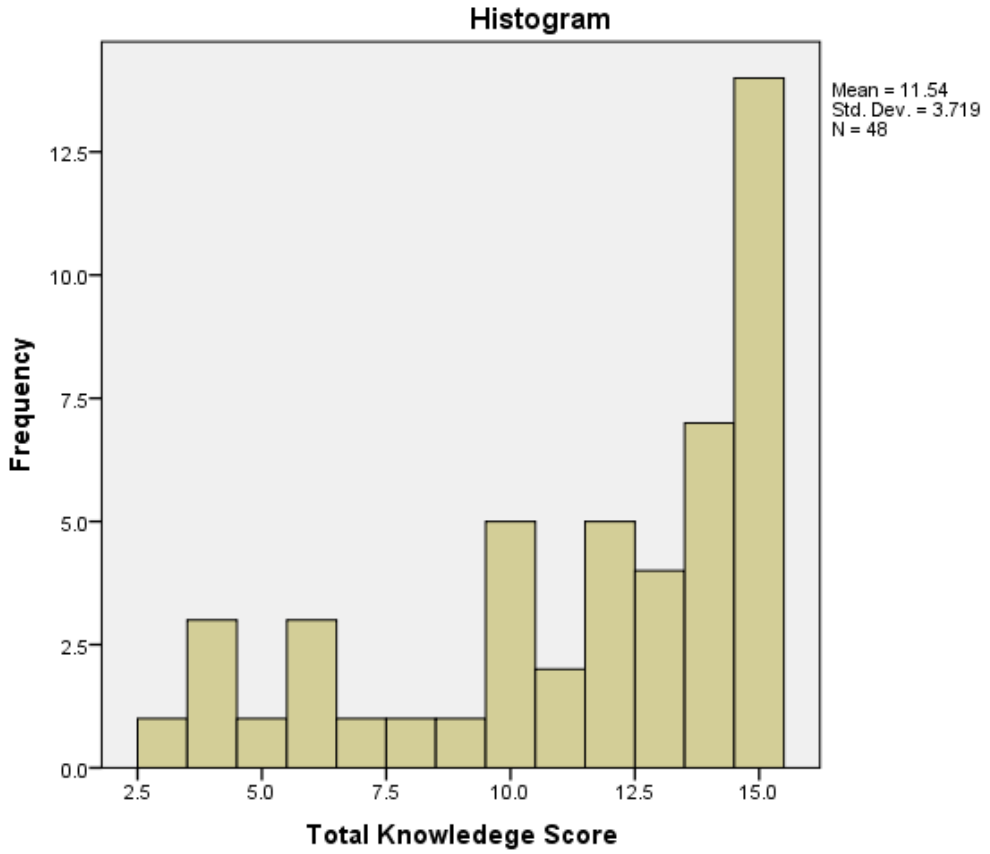
Descriptives

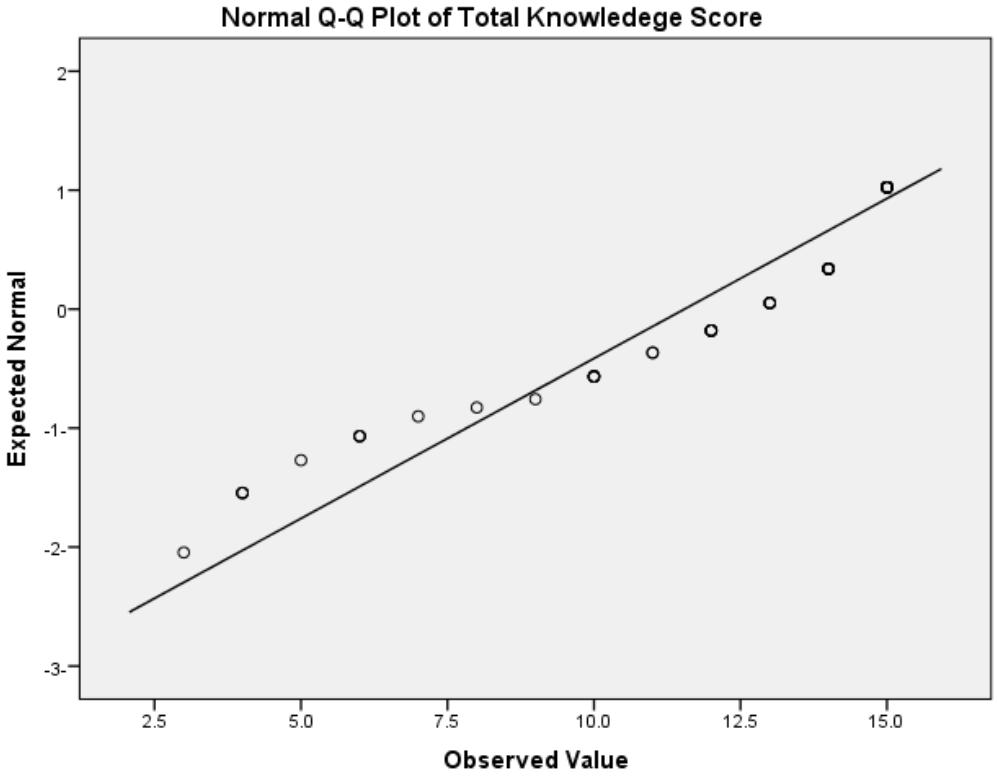
			Statistic	Std. Error
Total Knowledege Score	Mean		11.54	.537
	95% Confidence Interval for Mean	Lower Bound	10.46	
		Upper Bound	12.62	
	5% Trimmed Mean		11.79	
	Median		13.00	
	Variance		13.828	
	Std. Deviation		3.719	
	Minimum		3	
	Maximum		15	
	Range		12	
	Interquartile Range		5	
	Skewness		-.940-	.343
	Kurtosis		-.342-	.674

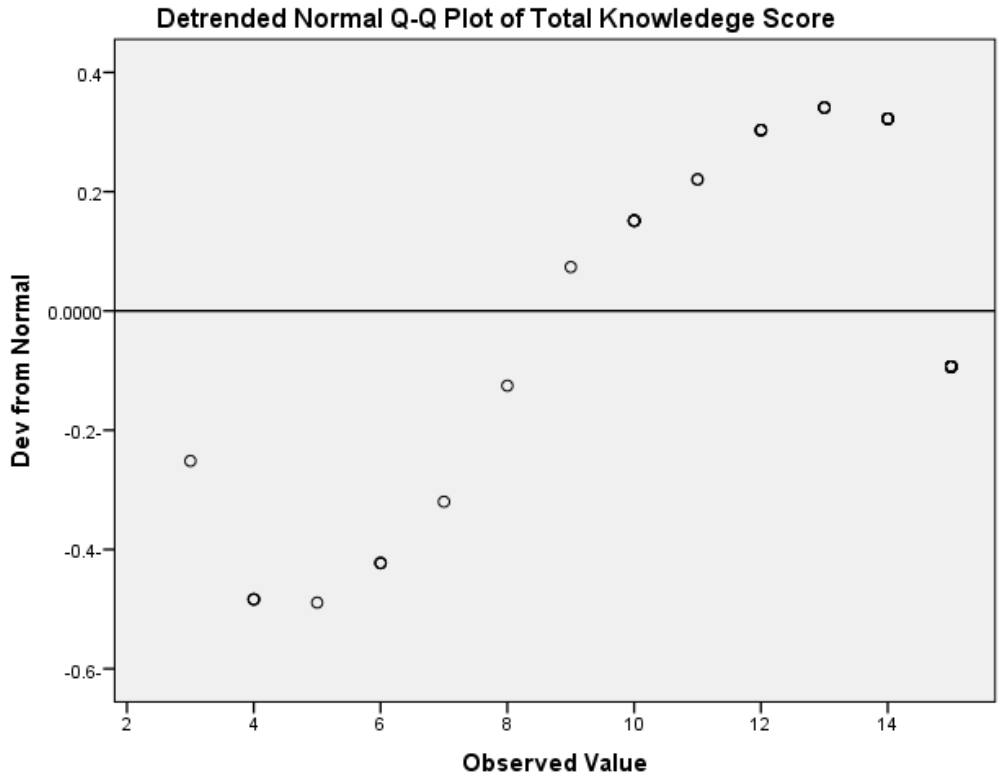
Tests of Normality

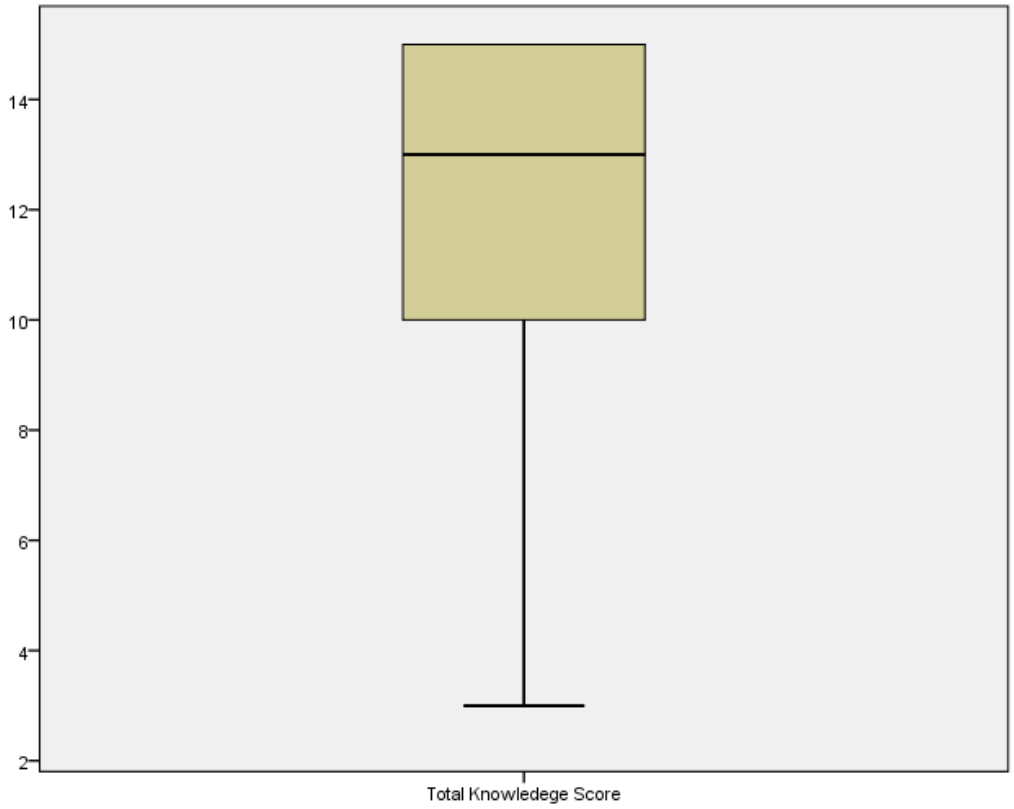
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total Knowledege Score	.183	48	.000	.841	48	.000

a. Lilliefors Significance Correction.


Histogram
Mean = 11.54
Std. Dev. = 3.719
N = 48
Frequency
12.5
10.0
7.5
5.0
2.5
0.0
2.5
5.0
7.5
10.0
12.5
15.0
Total Knowledege Score


Normal Q-Q Plot of Total Knowledege Score
Expected Normal
2
1
0
-1-
-2-
-3-
2.5
5.0
7.5
10.0
12.5
15.0
Observed Value


Detrended Normal Q-Q Plot of Total Knowledege Score
Dev from Normal
0.4
0.2
0.0000
-0.2-
-0.4-
-0.6-
2
4
6
8
10
12
14
Observed Value


14
12
10
8
6
4
2
Total Knowledege Score

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
To make or process (a raw material) into a finished product, especially by means of a large-scale industrial operation	48	-1.653-	.343	.764	.674
The act or process of separating or reducing something into its constituent parts	48	-.533-	.343	-1.792-	.674
Relating to an application that can combine text, graphics, full-motion video, and sound into an integrated package	48	-1.331-	.343	-.241-	.674
To save (documents, data, etc.) in a format usable by another application program.	48	-.730-	.343	-1.533-	.674
Close attention or vigilance to minimize risk	48	-.947-	.343	-1.154-	.674
A unit of length equal to one hundredth (10-2) of a meter	48	-1.847-	.343	1.471	.674
A room or building equipped for scientific experimentation or research	48	-1.192-	.343	-.605-	.674
a person employed in a laboratory, technical college, or scientific establishment to do practical work	48	-.947-	.343	-1.154-	.674
A device that applies electric current in proper sequence to the spark plugs of an engine.	48	-.440-	.343	-1.887-	.674
I will graduate this year with …….	48	.	.	.	.
Numerical data	48	-1.847-	.343	1.471	.674
…… is an important component of fibre optics	48	-1.483-	.343	.206	.674
Use a …….for tightening or loosening screws	48	-1.847-	.343	1.471	.674
Having great influence more than expected	48	-1.847-	.343	1.471	.674
A notice, such as a poster or a paid announcement in the print, broadcast, or electronic media, designed to attract public attention or patronage.	48	-1.331-	.343	-.241-	.674
Valid N (listwise)	48				

Tests of Normality[b]

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
To make or process (a raw material) into a finished product, especially by means of a large-scale industrial operation	.495	48	.000	.476	48	.000
The act or process of separating or reducing something into its constituent parts	.403	48	.000	.614	48	.000
Relating to an application that can combine text, graphics, full-motion video, and sound into an integrated package	.476	48	.000	.520	48	.000
To save (documents, data, etc.) in a format usable by another application program.	.425	48	.000	.595	48	.000
Close attention or vigilance to minimize risk	.446	48	.000	.571	48	.000
A unit of length equal to one hundredth (10-2) of a meter	.504	48	.000	.450	48	.000
A room or building equipped for scientific experimentation or research	.466	48	.000	.539	48	.000
a person employed in a laboratory, technical college, or scientific establishment to do practical work	.446	48	.000	.571	48	.000
A device that applies electric current in proper sequence to the spark plugs of an engine.	.393	48	.000	.621	48	.000
Numerical data	.504	48	.000	.450	48	.000
…… is an important component of fibre optics	.486	48	.000	.499	48	.000
Use a …….for tightening or loosening screws	.504	48	.000	.450	48	.000
Having great influence more than expected	.504	48	.000	.450	48	.000
A notice, such as a poster or a paid announcement in the print, broadcast, or electronic media, designed to attract public attention or patronage.	.476	48	.000	.520	48	.000

a. Lilliefors Significance Correction.

b. I will graduate this year with ……. is constant. It has been omitted.

2. Tests of Normality: Attitude

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total Attitude Score	48	29	75	65.58	11.927	-1.685-	.343	1.963	.674
Valid N (listwise)	48								

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total Attitude Score	48	-1.685-	.343	1.963	.674
Valid N (listwise)	48				

Tests of Normality: Attitude Kolmogorov-Smirnov[a] - Shapiro-Wilk

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Total Attitude Score	48	100.0%	0	0.0%	48	100.0%

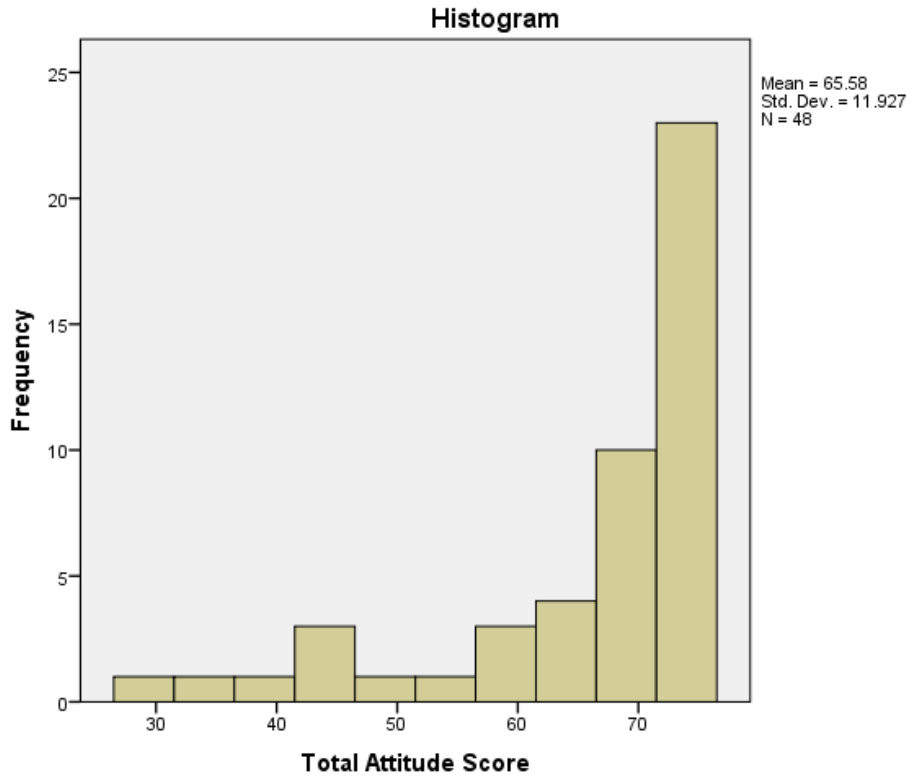
Descriptives

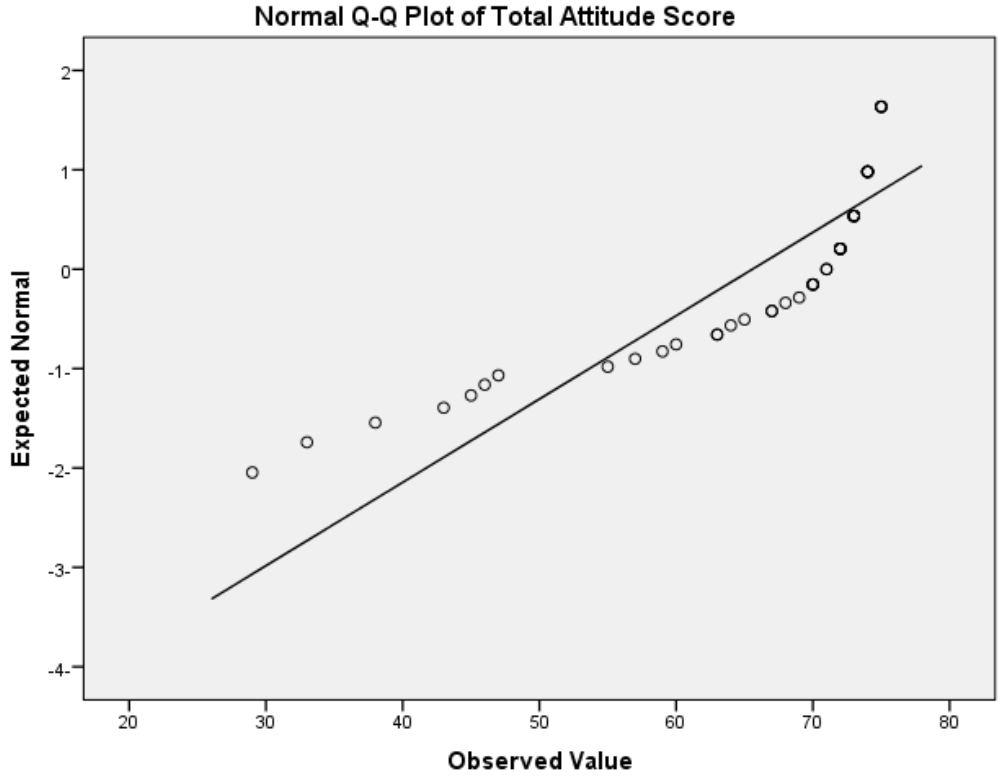
			Statistic	Std. Error
Total Attitude Score	Mean		65.58	1.721
	95% Confidence Interval for Mean	Lower Bound	62.12	
		Upper Bound	69.05	
	5% Trimmed Mean		66.92	
	Median		71.00	
	Variance		142.248	
	Std. Deviation		11.927	
	Minimum		29	
	Maximum		75	
	Range		46	
	Interquartile Range		10	
	Skewness		-1.685-	.343
	Kurtosis		1.963	.674

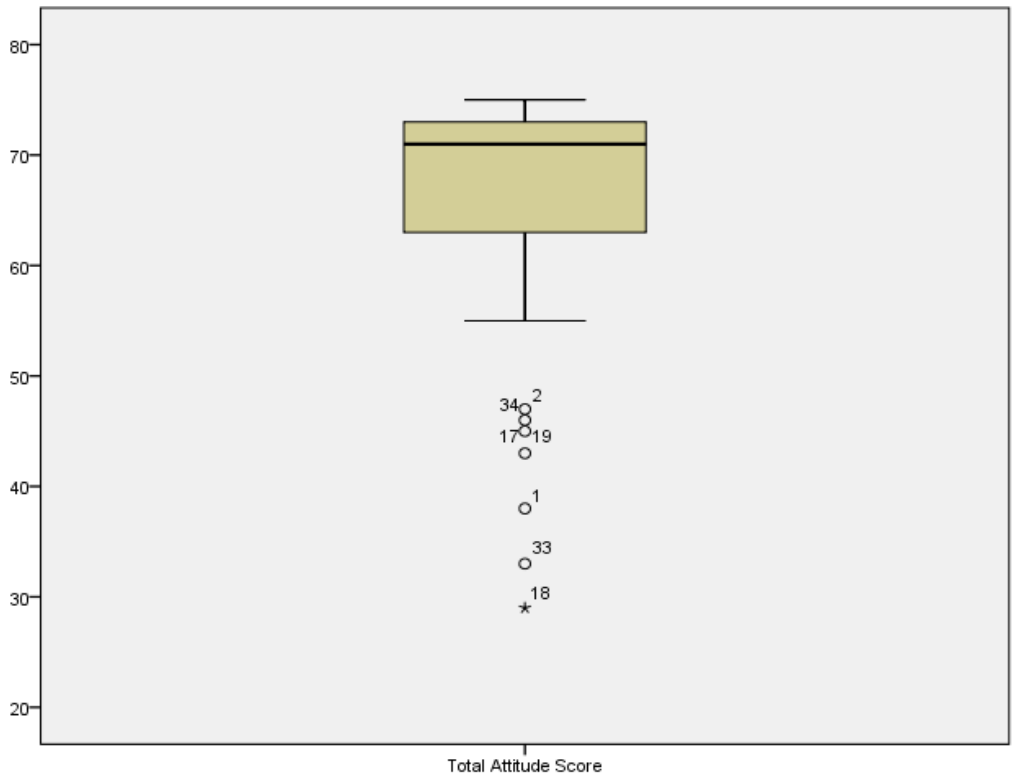
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total Attitude Score	.249	48	.000	.745	48	.000

a. Lilliefors Significance Correction.


Histogram
Mean = 65.58
Std. Dev. = 11.927
N = 48
Frequency
Total Attitude Score


Normal Q-Q Plot of Total Attitude Score
Expected Normal
Observed Value



Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Learning ESP lexis increases my motivation to study in the college	48	-1.888-	.343	3.221	.674
My knowledge of ESP lexis makes my English vocabulary retention longer	48	-1.952-	.343	3.065	.674
ESP lexis are difficult to understand	48	-1.237-	.343	.288	.674
Learning ESP lexis improves my English communication skills	48	-1.740-	.343	2.144	.674
Learning ESP lexis is important for my field of studies	48	-1.765-	.343	2.398	.674
Learning ESP lexis is useful for furthering my technical education	48	-2.068-	.343	4.051	.674
Learning ESP lexis enhances my linguistic accuracy	48	-1.942-	.343	3.371	.674
Learning ESP lexis rises my confidence to earn good marks	48	-.339-	.343	-.658-	.674
Learning ESP lexis is boring	48	-1.130-	.343	-.068-	.674
My knowledge of ESP lexis helps me learn ESP more efficiently	48	-2.072-	.343	2.392	.674
Learning ESP lexis enhances my ability to speak fluently	48	-1.888-	.343	3.221	.674
Learning ESP lexis motivated me to engage in more oral activities in the future	48	-2.068-	.343	4.051	.674
Learning ESP is not suitable for my field of study	48	-1.130-	.343	-.068-	.674
learning ESP through learning ESP lexis will enhance my future career	48	-2.072-	.343	2.392	.674
I like to learn ESP through learning ESP lexis	48	-2.068-	.343	4.051	.674
Total Knowledege Score	48	-.940-	.343	-.342-	.674
Total Attitude Score	48	-1.685-	.343	1.963	.674
Valid N (listwise)	48				

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Learning ESP lexis increases my motivation to study in the college	.387	48	.000	.646	48	.000
My knowledge of ESP lexis makes my English vocabulary retention longer	.413	48	.000	.606	48	.000
ESP lexis are difficult to understand	.308	48	.000	.733	48	.000
Learning ESP lexis improves my English communication skills	.322	48	.000	.665	48	.000
Learning ESP lexis is important for my field of studies	.468	48	.000	.548	48	.000
Learning ESP lexis is useful for furthering my technical education	.397	48	.000	.618	48	.000
Learning ESP lexis enhances my linguistic accuracy	.400	48	.000	.628	48	.000
Learning ESP lexis rises my confidence to earn good marks	.207	48	.000	.895	48	.000
Learning ESP lexis is boring	.312	48	.000	.740	48	.000
My knowledge of ESP lexis helps me learn ESP more efficiently	.513	48	.000	.421	48	.000
Learning ESP lexis enhances my ability to speak fluently	.387	48	.000	.646	48	.000
Learning ESP lexis motivated me to engage in more oral activities in the future	.397	48	.000	.618	48	.000
Learning ESP is not suitable for my field of study	.312	48	.000	.740	48	.000
learning ESP through learning ESP lexis will enhance my future career	.513	48	.000	.421	48	.000
I like to learn ESP through learning ESP lexis	.397	48	.000	.618	48	.000

a. Lilliefors Significance Correction.