The Use of Referential Cohesion in Academic Texts by Persian EFL Learners

Sahar Naderi
snaderi33@yahoo.com
School of Language Studies and Linguistics
Faculty of Social Sciences and Humanities
Universiti Kebangsaan Malaysia

Yuen Chee Keong
yuenck@pkrisc.cc.ukm.my
School of Language Studies and Linguistics
Faculty of Social Sciences and Humanities
Universiti Kebangsaan Malaysia

Hafizah Latif
hlatif@pkrisc.cc.ukm.my
School of Language Studies and Linguistics
Faculty of Social Sciences and Humanities
Universiti Kebangsaan Malaysia

ABSTRACT

Writing cohesively remains a challenging task for many ESL and EFL learners and users of English, even at advanced levels. Despite its importance in academic writing, elements of cohesion have rarely been researched especially among Persian EFL writers. This study is aimed at filling the gap in the literature through an investigation of referential ties as one of the most explicit cohesion markers (Halliday and Matthiessen 2004). Papers by Persian scholars in the engineering field who attended a Nanotech conference in Malaysia, were reviewed for referential ties based on Systemic Functional Grammar (Halliday 1994; Halliday and Matthiessen 2004). The distribution and categorization of such ties were described using both descriptive and inferential statistics. Subsequently the reference usage by Persians who performed research in Malaysian and Iranian universities were compared. A discussion is presented to examine any improvements due to the environment for the group of Persians studying in Malaysian universities using English language as the medium of instruction. The results confirm that Persians studying in Malaysian universities produce and repeat some components of referential ties more frequently in their academic writing when compared with their peers studying in Iranian universities. In addition, the results of this study are compared with the findings of some other studies among ESL/EFL learners of different nationalities to explain the cases of overuse, underuse, and misuse of referential cohesion which has implications for pedagogical objectives.

Keywords: academic writing; referential cohesion; systemic functional grammar; Persian EFL learners, conference papers

INTRODUCTION

Cohesion, the first standard of textuality (Mikhchi, 2011), is a feature that implements intact continuation in a text through holding clauses and sentences together (Coskun, 2011, p. 892). Halliday and Hasan (1976, p. 4) characterize cohesion as a semantic concept that "occurs when the interpretation of one linguistic element in the discourse is dependent on another"

which is gained by using references, conjunctions, ellipses, and lexical cohesion. Referential cohesion has been defined as "linguistic forms whose function is to mark the information status of an entity in the universe of discourse" (Serratrice, 2007, p. 1058). Coskun (2011, p. 893) argues that reference is made "by using another word, group of words, or suffix with the same meaning in the same sentence or a subsequent sentence, instead of a word denoting a concept, entity, or situation which is used earlier in the same text". Therefore, referential ties put a stop to needless repetition of an expression while at the same time it facilitates the comprehension of the discourse. In the academic context, referencing is a "resource of cohesion by which pronouns and deictic expressions such as *this* and *that* refer to elements in the texts or outside of the text" (Schleppegrell, 2004, p. 63).

As a key concern even for native English speakers, writing cohesively remains a difficulty among English as a Second Language/ English as a Foreign Language (ESL/EFL) users of English as an academic language (Liu & Braine, 2005; Zhang, 2000; Hinkel, 2001; Ghoorchaei et al., 2010). An accurate ability to make clear correct references is a prerequisite for the logical organization of a sequence of actions especially in scientific activities. Therefore, problems in both the comprehension and production of referential ties influence the academic achievements and production of students (Roth et al., 1995). Research into referential ties mainly focuses on analyses of written and oral narratives by ESL/EFL learners and then making comparisons with native English speakers (Serratrice, 2007; Coskun, 2011; Roth et al., 1995; Kang, 2009; Jisa, 2000; Gullberg, 2006). Moreover, most previous research in this area (Mc Gee, 2009; Roth et al., 1995; Gray and Cortes, 2011; Gray, 2010; Coskun, 2011; Serratrice, 2007; Kang, 2009; Norman, 2003) is based on Halliday and Hasan's influential work *Cohesion in English* (1976). Therefore this study differs from the previous studies in two ways since it relies on Halliday's more recent work; Systemic Functional Linguistics and Halliday and Matthiessen (2004) as a theoretical framework and it examines the referential cohesion of academic prose rather than narratives.

RESEARCH QUESTIONS

Among the works on cohesion in academic discourse, referential cohesion has not been discussed exhaustively. Studies of references (Liu & Braine, 2005; Zhang, 2000; Hinkel, 2001) have mostly failed to give a detailed description of the distribution of the three categories of reference ties in non-native English usage. In order to fill this gap, the present study investigates references in conference proceedings written by Persian EFL students/researchers to evaluate the degree of referential ties in their academic written discourses. Aiming for an explanation and description of referential cohesion, the following research questions have been designed to shed some light on referential ties within the academic writing of Persian scholars in the English language through a text-linguistics model. The first two research questions of this study characterize the referential ties of the written academic discourse hence the third question has been designed to check the influence of studying externally to the native country (Iran) with English language as the medium of instruction in the academic writing of Persian students. The research questions are:

1. How frequently do Persians use referential cohesive ties in their academic writings? Which referential cohesive ties are most frequently used by the Persians of Iranian and Malaysian universities?
2. What are the distributions of Personal, Demonstrative, and Comparative references in the academic writings of Persians?
3. What differences (if any) can be found in the usage frequency of referential cohesive ties between the Persians studying in Malaysian universities and the Persians studying in Iranian universities?

LITERATURE REVIEW

Research in the area of cohesion in academic writing mostly includes a comparison of the quality of the writing with the frequency of cohesive markers as referential devices (Jafarpur, 1991; Zhang, 2000; Liu & Braine, 2005). Other investigations in the area of references look at special aspects such as Norman's (2003) research that reviewed consistent referencing in academic texts or Cornish (2009) who looked at the intersentential references and relations in discourse.

References and the quality of writing were investigated in both Liu and Braine (2005) and Zhang (2000) who studied the referential cohesion of Chinese undergraduate students who were non-English majors using the taxonomy and analytical framework of Halliday and Hasan (1976). The percentage of referential ties in the results of the two studies was quite comparable. Although the types of writing tasks were differentiated as argumentative and expository respectively, the findings demonstrated that in both sets of results, pronominal references were the most dominant followed by demonstratives and then comparatives. The definite article appeared to be the most dominant reference in both studies yet there were many cases of overuse and misuse in both analyses. Zhang (2000) agrees with Liu and Braine (2005) that Chinese students are weak in taking advantage of comparatives while Liu and Braine (2005, p. 631) spotted another problem regarding referential devices which is the "shifted usage of pronouns" without an explicit referent or no agreement with the previous text.

In other contexts, Roth et al. (1995) and Serratrice (2007) researched the use of referential ties in narratives by young individuals. Roth et al. (1995) compared referential cohesion of normally achieving students with students with learning disabilities in three age groups through narration in the form of spontaneous story production and a picture book story. The frequency of the production of references rose quite similarly in accordance with age in the two groups. Instances of the definite article and personal references were under the influence of both age and IQ of the students although demonstrative and comparative references occurred so rarely that they could be considered negligible. On the other hand, Serratrice (2007) aimed to evaluate referential cohesion of bilingual children fluent in both English and Italian in comparison with their monolingual peers. Serratrice assumed that the English and Italian languages are different in their referent maintenance. She investigated "morpho-syntactic forms to introduce, re-introduce, and maintain references through a complex narrative" (2007, p. 1063). Serratrice (2007) found that continuous exposure to the English and Italian languages positively influenced and developed native-like access to suitable referential ties in the discourse of the language learners.

All these empirical studies emphasize the significant role that referential ties play in the cohesion of all types of texts produced by ESL/EFL learners and further investigation has been suggested in different societies with different mother tongues. Therefore, the present research tries to describe the referential devices used by Persian individuals in their academic writing to shed some light on both the academic language and the cohesive markers used by Persian scholars.

RATIONALE FOR THE STUDY

In Iran, English language is taught alongside the Arabic language from the first year of all junior high schools (Salehi & Melor Md Yunus, 2012) when students are twelve years old and this continues up to undergraduate courses in universities where English transforms from a subject of education to a tool for education. English is taught and assessed as a separate subject in schools and universities despite the fact that postgraduate students need a

reasonable level of mastery of the English language as an important skill to be able to comprehend their technical texts or to discuss the results of their experiments or to study publications (Tardy, 2005). While writing cohesively remains a challenging skill for most EFL learners (Liu & Braine, 2005) studies on Persian EFL learners reported deficiencies in taking advantage of cohesive markers in their written discourse (Mikhchi, 2011; Jafarpur, 1991). Therefore, in order to improve this challenging issue a careful description and explanation of the use of cohesive markers (including referential ties) in texts by Persian EFL learners seems to be both essential and considerable. Hence, the present study aims to describe the referential cohesion of Persian postgraduate students firstly to see the distribution of categories of references that they produce in their conference proceedings according to Hallidayan grammar, and secondly to compare two groups of Persians who are researching in Iranian and Malaysian universities regarding their use of referential cohesion. This comparison is intended to reveal any negative or positive influence that may have occurred in terms of the quality and quantity of referential cohesive markers in the texts written by Persian students in Malaysian universities, especially as a result of studying using the English language as the medium of instruction.

METHODS

The Hallidayan Systemic Functional approach (Halliday and Matthiessen, 2004) was selected as the theoretical framework for this analysis. According to the Systemic Functional views, referencing is formed by using Personal references such as *he, him, his*, Demonstrative references such as *the, this*, *these*, and Comparative references including *more, same, other*. A complete table of references is attached in Appendix A. The objectivity and reliability of the findings of the present study were assured by the detailed coding system of this model. The research design of this study was based on field research in a descriptive scanning model (Coskun, 2011). This model allows the researchers to obtain their desired elements through careful scanning of the data to reach their descriptive aims. In the case of the present research, texts from two groups of Persian scholars were carefully investigated qualitatively for the three categories of references. There were twenty three texts (19358 words) which were analysed for the purposes of this study. Eleven of these texts (10229 words) were written by Persians of Iranian universities while the other twelve texts (9129 words) were written by Persians studying at Malaysian universities. These papers were presented at a conference on Nanotechnology which was held by UKM. Further explanations about the writers are provided in the following section.

Referential ties were identified and classified under their respective categories. In some special cases, these referential ties needed further investigation to decide the nature of the intended reference. For example, according to Halliday and Matthiessen (2004), "*it*" is a Personal reference. More specifically it is a singular neuter, functioning as a Determinative while it is a Demonstrative reference when it has a non-specific class that functions as a Head. The following sentence from the texts included in the present research includes both types of "*it*":

> ***It*** *is worth mentioning that, although the experiment did not result in a higher percentage of SiC in titanium,* ***it*** *provides the feasibility to fabricate wider and deeper titanium metal matrix composites.*

The first "*it*" belongs to the Demonstrative references which are non-specific and function as a Head and the second "*it*" is a Personal reference that refers to the previously mentioned experiment.

PARTICIPANTS

The participants in this study were Persian scholars who attended a Nanotechnology conference. In this study, the participants are referred to as scholars because they are researching in their own areas as postgraduate students using the English language as the medium of research. Although they may have attended English language classes, English is a foreign language to them. The participants filled in a biodata form which requested some general information about the main authors of the proceedings, their nationalities and backgrounds as well as the role of the co-authors in the linguistic issues and writing process and a few other details. Twelve of the twenty three individuals studied at postgraduate level in either of two of the best universities in Malaysia, namely Universiti Kebangsaan Malaysia (UKM) and Universiti Putra Malaysia (UPM), while the other eleven individuals attending the conference were from Iranian universities. Therefore the Persian participants at the conference were divided into two groups: those who were postgraduate students in Malaysia with English language as the medium of instruction and those studying in Iranian universities who attended the conference from Iran.

DATA COLLECTION

The conference proceedings of an international conference with the theme of Nanotechnology held at Universiti Kebangsaan Malaysia (UKM) formed the data for this study. The scope of the conference was fourfold divided into over 153 presented papers in four major symposiums. Twenty three of these papers were presented by Persian scholars either from Malaysian or Iranian universities. The main and first writers of the twenty three proceedings that formed the data of this study were all Persians as confirmed through the biodata questionnaires. A few of the writers were under the supervision or sponsorship of the university lecturers, however the corresponding author certified that the co-authors had nothing to do with the English language and writing process. Since the proceedings were collected from one conference, it could be asserted that they were all in a similar area of relevance. All of the proceedings included an experiment. Although the word numbers were not alike, varying from 314 to 1792 words, the similarities regarding the types of essays and the topics made the texts comparable.

PROCEDURE OF THE STUDY

Investigation for the referential ties of the conference proceedings was performed through identifying, classifying, and counting of the referential ties in accordance with the well-developed taxonomy of references of Halliday and Matthiessen (2004). All instances of the references used by Persian authors in this study were identified manually in an exhaustive and outright manner. The initial findings were checked to reach to more reliable results. Subsequently, reference items in each proceeding were classified according to Halliday and Matthiessen (2004, p. 553) into three classes of references: Personal, Demonstrative, and Comparative. Frequencies and percentages of each referent category were then determined.

After initial descriptive statistics such as frequencies and percentages of each type of individual reference, inferential statistics (G^2 value) were then applied for each category of references to assess the degree of relationship and contribution of the frequencies of referential ties between the two groups. A comparison of the two sets of data was made by calculating the relative frequencies of the types of references as well as measuring the G^2 value (Rayson, 2012) which is a suitable tool for comparing features of the corpora of such sizes (Gardezi & Nesi, 2009). The Log-likelihood Calculator uses Dunning's G^2 ratio as a

statistical measure to compare the frequencies of any linguistic feature, which in this study are referential devices, against the total number of words in two different-sized corpora. The higher the G^2 ratio, the more considerable is the difference between the two frequency scores. Some examples provided in the following sections clarify this idea. The G^2 value was employed in order to make a separate comparison between the personal, demonstrative and comparative references of the two groups. In the subsequent step, the method was applied to determine the frequency of the total references produced by the two groups.

RESULTS

The first research question tests the usage frequency of referential ties in the conference proceedings of the Persian participants. Overall, there are 1,765 referential ties in the 19,358 words that formed the data of this study. To be more precise, 9.11 % of the words produced by the Persians in this study are from the three classes of references. In other words, referential ties make up 9.11 % of the texts by the Persian scholars who attended the conference.

TABLE 1. Frequency and average of references in proceedings

	Persians in Iranian universities	**Persians in Malaysian universities**	**Total**
Total number of words	10229	9129	19358
Reference frequency	894	871	1765
Average	81	72	76.7
Frequency percentage	8.7	9.5	9.11

The frequencies of references of texts by the two groups of Persians from Iranian and Malaysian universities are 894 and 871 respectively. Since the total number of words in the two corpora is not exactly the same, the total frequencies of their referential ties are considered as 'almost alike' instead of being identical. The average number of occurrences of references amongst the group that studied in Iran is 81, a little higher than the papers received from Malaysian universities at 72, though the difference between the average number of references in the two groups is not meaningful since the number of words in each is not exactly the same with 10,229 words in the Iranian proceedings and 9,129 in the Malaysian proceedings.

To determine whether the two groups employed similar numbers of referential ties or if they acted differently regarding the usage of references, a review was undertaken with the help of Rayson's Log-likelihood Calculator website (Rayson, 2012) that calculates the differences in distribution between the two sets of data (Gardezi & Nesi, 2009, p. 242). This present study employs the Log-likelihood Calculator since single measurements of the frequencies of the linguistic items is not considerable when the sizes of the two sets of data are different. The Log-likelihood Calculator website is designed for corpora comparison when two sets of data do not have the same number of words. Rayson interprets the G^2 value as significant and meaningful when it is 3.8 or higher at a level of $p < 0.05$ and 6.6 at a level of $p < 0.01$. It should be emphasized that in many tables of the present research, relative frequencies are mentioned which indicate the occurrence of a specific item per 100 words.

In the case of the present study and the meaningfulness of the difference between the frequencies of referential ties of the two sets of data, the G^2 value (Log-likelihood, Rayson, 2012) was determined as 3.39, which confirms that the total number of references of the two sets of data are not statistically different and the difference in the average number of references in the two groups (81 and 72) is not meaningful, as shown in Table 2.

TABLE 2. Relative frequencies and G^2 Value of the two groups

	Persians in Iranian universities	**Persians in Malaysian universities**	**G^2 value**
Total number of words	10229	9129	
Reference frequency	894	871	
Relative frequency	8.74	9.54-	3.39

The second research question concerns the distribution of referential ties among the three categories of Personal, Demonstrative, and Comparative references in the texts of this study based on the Hallidayan Systemic Functional Linguistics (Halliday & Matthiessen, 2004). The categories of references are not used in a similar way in all texts under analysis since some texts limited their usage to one or two categories of reference and did not include any example of one or sometimes two other types of reference. All the proceedings of the conference written by Persian scholars made use of Demonstratives such as *the, this and these*.

Predictably, the Demonstrative references were dominant among the types of references. This might be because of the great number of occurrences of the definite article, "*The*", which is considered a demonstrative reference according to Hallidayan linguistics (Halliday & Matthiessen, 2004). This is in agreement with the results of Zhang (2000) and Liu and Braine (2005) who also found the definite article as the most frequent referential device in cohesion in their investigations. The definite article occurred 1,324 times in the proceedings of the Persian scholars which is greater than the frequency of all the other references (Table 3).

TABLE 3. The distribution of the definite article in the two groups of this study

	Persians in Iranian universities	**Persians in Malaysian universities**	**Total**
Total articles	894	871	1765
the	707	617	1324
Other articles	187	254	441

The frequencies and percentages of the categories of references are presented in Table 4. From the table it is obvious that the participants studying in Malaysian universities prioritize the use of Personal and Comparative references compared to the Persians studying in Iranian universities, although, Demonstratives are used relatively similarly by the two groups in this study.

TABLE 4. Distribution of references in the three categories based on SFL

References	**Persians in Iranian universities**	**Persians in Malaysian universities**	**Total frequency**
Personal frequency	46	81	127
percentage	36 %	63 %	100 %
Demonstrative frequency	813	734	1547
percentage	52 %	47 %	100 %
Comparative frequency	35	56	91
percentage	38 %	62 %	100 %
TOTAL	**894**	**871**	**1765**

Table 5 shows the personal references used in the proceedings written by Persian participants in the data of this study. Personal references appear as the second most frequent reference of

this analysis with 127 occurrences. From twelve possible personal references, only six are found in the data of the Persians studying in Malaysian Universities while the Persians studying in Iranian universities apply only four overall. Feminine singular references (*she, her, hers*) do not appear in the texts at all. Hence, the distribution of the personal reference is not similar between the two sets of data which is the focus of the third research question and will be discussed later.

TABLE 5. Distribution of Personal references within the two groups

Personal References	Persians in Iranian universities	Persians in Malaysian universities	Total
he	0	2	2
it	12	16	28
its	18	19	37
they	5	17	22
them	0	4	4
their	11	23	24
Total	**46**	**81**	**127**

Table 6 shows the findings regarding the demonstrative references of this study. Demonstratives are the most frequent references. Although the frequency of the definite article, "*The",* increased the ranking of this category, there are 223 occurrences of other demonstratives besides the definite article which is higher than the frequency of personal references.

TABLE 6. Distribution of Demonstrative references in the two groups

Demonstratives	Persians in Iranian universities	Persians in Malaysian universities	Total
the	707	617	1324
it	36	27	63
this	49	73	122
these	12	12	24
that	4	3	7
those	5	2	7
Total	**813**	**734**	**1547**

As can be seen in Tables 5 and 6, "*it*" can be used both as a personal reference such as in:

> *Dopamine cannot be administered directly because **it** cannot cross the blood brain barrier…*

and as a determinative reference such as in:

> ***It** is interesting to note that the sensitivities of the modified electrode to 6-MP in the absence and presence of UA are virtually close…*

Therefore the determination of the precise category needed further qualitative analysis. In related investigations, it appears that "*it*" is mostly employed in the demonstrative position by Persian scholars from both groups. Table 7 describes the application and functions of "*it*" more precisely both as Personal and Demonstrative.

TABLE 7. Distribution of *it* in its two functions (Demonstrative and Personal)

it	**Persians in Iranian universities**	**Persians in Malaysian universities**	**Total**
Demonstrative	36	27	63
Personal	12	16	28
Total	**48**	**43**	**91**

A qualitative investigation was conducted for the two potential references that could appear in other functions; *that* and *there*. According to Halliday and Matthiessen (2004) "*there*" is a demonstrative reference only when it is employed as an adjunct, as the opposite of *here*, and the other functions that it may possess cannot be considered as demonstrative references. Qualitative analysis confirmed that there is no usage of "*there*" in reference positions in the data of this study because all the uses of "*there"* were located in an initial position of a sentence or a clause. For example:

> ***There** is a difference in the application and material of the items…*

"*That*" can also appear in different functions and positions as a subordinator, relative pronoun, and complement (Hinkel, 2001, p. 117). For example, the following sentence (from the texts of this study) includes two different applications of "*that*".

> *We have shown <u>that</u> PAD etch can be used instead of HF, with the expense of SiO_2 etch rate lower than **that** of BHF.*

The first "*that*", shown underlined, is a relative pronoun without any referential role, while the second "*that*", shown bold, does have a referential role. So, a qualitative investigation is needed to find the frequency of "*that*" as a demonstrative. The results indicate only seven occurrences of "*that*" employed in demonstrative positions in the proceedings written by Persian scholars, leaving the other cases of "*that"* for the other functions. The following example is also from the Demonstrative group use of "*that*".

> *The particle diameter curves have an increasing trend up to a maximum value and beyond **that** is a gradual decreasing profile.*

As for Comparative references, this study identified thirteen types used in the texts. The overall frequency of the comparative references is 91. The group of Persians studying in Malaysian universities produce more comparatives compared to their peers studying in Iranian universities by 56 to 35 respectively. While *other, more, as* and *same* are the most frequent comparative references in general, the frequency of these three and their distribution within the two groups is considerable and will be discussed later. Two other comparative references, *such* and *so*, do not occur at all in the data from students studying in Iranian universities. Accordingly, it can be said that Persian scholars at Malaysian universities use Comparative references much more frequently and easily compared to their peers in Iran.

After the classification of the references of this study into the categories of Systemic Functional Linguistics, it is reasonable to look for any potential differences between the usages of references of each category in the group of Persians studying in Iranian universities and Persians studying in Malaysian universities which forms the focus of the third research question of this study as shown in Table 8. As explained earlier, any possible differences in the distribution of referential ties between the two sets of data are calculated through the G^2 value by using the Rayson's Log-likelihood Calculator website (Rayson, 2012).

TABLE 8. Relative frequency and Log-likelihood values of the categories

Category	Persians in Iranian universities (10229 words)	Relative frequency	Persians in Malaysian universities (9129 words)	Relative frequency	G^2 value
Personal	46	0.45	81	0.89-	14.16
Demonstrative	813	7.95	734	8.37-	1.05
Comparative	35	0.34	56	0.61-	7.57
Total	894		871		

Evidently, Personal and Comparative references are used differently by the Persian users from the Iranian and Malaysian universities because the G^2 values of both the Personal and the Comparative references are considerably higher than 3.8 which confirm the absolute meaningfulness of the two sets of data. Comparing the use of Personal references through use of the Log-likelihood Calculator showed a G^2 value of 14.16 which is higher than the critical value of 3.8 when $p < 0.05$. It can be concluded that Personal references are favoured more by Persian students studying in Malaysian universities compared to their peers who studied in Iran. Similarly Comparative references show a meaningful difference with a G^2 value = 7.57 based on their usage by Persian scholars from Malaysian and Iranian universities. Demonstratives are used relatively similarly by the two groups of individuals since the Log-likelihood of the frequencies of Demonstratives in the two sets of data is only 1.05 which is much lower than the threshold of 3.8 to be significant.

The most frequent referential ties and their relative frequencies in the two groups from the Persian studying in Iranian and Malaysian universities are presented in Table 9. The G^2 value column indicates the differences in the use of the two groups regarding that specific reference.

TABLE 9. The most frequently identified referential ties

Referential ties	Persians in Iranian universities	Relative frequency	Persians in Malaysian universities	Relative frequency	Total	G^2 value
the	707	6.91	617	6.76 +	1324	0.17
this	49	0.48	73	0.80 -	122	**7.88**
it Demo.	36	0.35	27	0.30 +	63	0.47
its	18	0.18	19	0.21-	37	0.26
their	11	0.11	23	0.25 -	34	**5.80**
it Pers.	12	0.12	16	0.18 -	28	1.12
these	12	0.12	12	0.13 -	24	0.08
they	5	0.05	17	0.19	22	**8.35**
other	2	0.02	15	0.16 -	17	**12.79**
more	8	0.08	6	0.07 +	14	0.10
as	4	0.04	8	0.09 -	12	1.85
same	2	0.02	8	0.09 -	10	**4.57**

As noted in Table 9, five referential ties, namely *this*, *their*, *they*, *other*, and *same*, produce a meaningful difference between the two groups in this study with a G^2 value > 3.8 in each case, whereas the other most frequent references are distributed relatively similarly between the two groups of Persian scholars. The most distinctive usage refers to "*other"* from the Comparatives category with a G^2 value = 12.79 which is employed significantly by Persians studying at Malaysian universities compared to the Persians studying at Iranian universities. This is followed by, *they* (G^2 value = 8.35), *this* (G^2 value = 7.88), *their* (G^2 value = 5.80), and

same (G^2 value = 4.57) which appear differently in the two groups. All of these referential ties are used relatively more by Persians studying at Malaysian universities which may indicate a possible improvement in the employment of references by Persians who have studied in Malaysian universities with English language as the medium of instruction compared to their peers in Iranian universities. It should be mentioned that according to this analysis no special category of Hallidayan linguistics showed any priority regarding the most frequent references since the most frequent references belong to all three categories of Personals (*they* and *their*) Demonstratives (*this*) and Comparatives (*other* and *same*).

DISCUSSION

The most obvious result of this study is the frequent use of the definite article in the proceedings written by Persian scholars however the percentage of the definite article has been reported variously in the literature (Ansarin, 2004; Wolf & Walters, 2001). It appears that different nationalities behave very differently regarding the use of the definite article. The percentage of usage for the definite article in the writings of Persians in this study is 75 %, which is much higher than Chinese students for Liu and Braine (2005) and Zhang (2000) reported that the percentage of the occurrences of the definite article in the writings of Chinese students was at 29.3 % (argumentative works). Similarly, the percentage of whole demonstrative category consisting of *the + that, this, these…*, was at 31.8 % in the essays that were the basis for Zhang's (2000) findings. Although the similarity in the findings of these two studies of Chinese students is indisputable, the figures are far from the percentages found in the present study.

Overuse of demonstratives, including the definite article, is not limited to the Persian students of the present study. Hinkel (2001) who compared the percentage of the demonstratives among five nationalities reported overuse of demonstratives among three of the nationalities in his studies. He showed that non-native English speakers produced a higher amount of demonstratives in their academic writing compared to the native English speakers. In his analysis, he compared the cohesive features of Japanese, Korean, Indonesian, and Arab students with native English speakers and he found the overuse of demonstratives among the Japanese, Korean, and Arabs although Indonesians did not show overuse of demonstratives in comparison with the native speakers.

The second most frequent referential cohesive of this study is "*This*" which is also from the Demonstratives category with 122 occurrences that deserves further discussion. Alongside *these, this* played a considerable role among the referential ties of the texts in this study. The results of Gray and Cortes (2011) who studied sentences beginning with an initial *this/these* in Material and Civil Engineering reveal that there is a high agreement between their findings and the present study regarding the use of *this/these* since these two demonstratives appeared 749 times in their 100,970 word corpus (f = 0.074 %) while the same demonstratives formed 146 ties in the 19,358 words of this study (f = 0.075 %). Hence, it could be said that generally, Persian scholars use and produce *this/these* in a very similar manner to the native English speakers in the same register.

The Personal references with four ties as shown in Table 9 of the most frequent references in this study also needs to be discussed here. Among the limited number of personal references of twelve elements, the four references *its, their, it (personal),* and *they* are more applicable to scientific texts. "*Its"* which achieved the highest ranking in the Personal category, is mostly used in making references to the process or model of the experiment such as in the following examples:

> *The results of RESS validated model demonstrated that increasing the pre-expansion temperature produced larger nanoparticles due to* ***its*** *effect on material agglomeration.*
>
> *The reason is although cellulose has many applications but* ***its*** *high cost restricts* ***its*** *industrial usage.*

Counting and differentiating the two different types of "*it"* as Personal and Demonstrative required a qualitative investigation as explained earlier. Like "*its", "it"* is used to refer to a method or procedure within scientific experiments. The use of "*they"* and "*their"* showed meaningful differences between the two groups of this study since Table 9 indicates the G^2 value of both are higher than the level of meaningfulness at 3.8 (*they*: 8.35, *their*: 5.80). Consequently, it could be said that Persian students studying in Malaysian universities make greater use of these two personal references. Most usages of "they" and "their" referred to the materials used both in the procedures, or the outcomes of the experiments. These findings are in accordance with Zhang (2000) and Liu and Braine (2005) since "*they"* and "*their"* are among the most frequent references found in their results. Earlier analyses of the writing of Chinese students (Liu & Braine, 2005; Zhang, 2000) found that "*more"* was one of the most frequent referential cohesive devices. However, in terms of this current study, Persian participants from the Malaysian universities do not show any special preference compared to the participants from Iranian universities since the G^2 value of "*more"* is very low (0.10) and is therefore meaningless.

The counting of "*as*" as a cohesive reference also needs some explanation. "*As*" occurred twenty three times in the proceedings of the Persian writers. Except for one case, all the other twenty two used "*as*" in structures like *as soon as, as low as*;

> *The beads were formed* ***as soon as*** *the mixture of chitosan-CNT solution was dropped into a base solution via a needle.*

However this study counted "*as"* in these frequent patterns (as soon as, as low as) as one referential tie because both of the two "*as*" belong to that same structure and one could not exist without the other. Therefore the total frequency of "*as*" is presented as twelve instead of twenty three. However Rayson's Log-likelihood Calculator did not reveal a meaningful G^2 value even if the frequency of "*as*" is evaluated at twenty three. Therefore this study maintains a logical selection to calculate the frequency instead of mere mechanical counting of the occurrences.

Among the comparatives, "*other"* and "*same"* are used differently by the two groups since the G^2 value of both words were high with "*other"*: 12.79 and "*same":* 4.57, which is more than the level of distinctiveness at 3.8 (Rayson, 2012). It could be inferred that the Persian students in Malaysian universities use comparative references, specifically "*other"* and *"same"*, more conveniently in their scientific texts which is of value especially in academic discourse productions since making comparisons and findings relations is one of the objectives of any scientific assessment and scholarly discourse. Although Serratrice (2007) researched into the bilingual referential cohesion of children, her findings are in agreement with some aspects of the present study since she infers that constant contact with both languages increases native-like access to referential cohesion which occurs in texts written by Persian students studying in Malaysian universities.

CONCLUSION AND IMPLICATIONS

This study aimed at describing the referential choices of two groups of Persian scholars in their academic writing. The first group studied in Iranian universities and the second group studied in Malaysian universities. This study explored the referential ties in the proceedings written by these Persian scholars for a conference and discussed the specifications of usage of references based on Systemic Functional Linguistics. The major limitation of this study is the size and variety of the data which has been confined to the proceedings of a single conference. Researching more expanded data could fully describe and explain the referential characteristics of academic texts produced by Persians. In addition, the present study is based on the analysis and description of academic papers, although it does not look for any relation between the level of writing and referential ties.

The findings of this study suggest that Persian scholars lack a correct understanding of definiteness and the definite article. Although there is no definite article in the Persian language (Ansarin, 2004), "*The"* was the favourite referential tie among Persians of this study. There are many cases of overuse and misuse alongside with underuse of the other referential cohesive words which leads to extensive repetition of the definite article. Therefore, the area of definiteness needs development and improvement among Persian individuals to be more accurate in their language productions, especially in the case of English. Teachers of academic writing courses in Malaysian universities who administer such classes for international students (especially Persians) should explain both the definite and indefinite articles more comprehensively in order to prevent overuse and misuse since the findings of this study refer to serious misunderstandings in this area. Enhancing the awareness of graduate students towards this issue could be achieved through explicit instruction and by providing sufficient examples in writing classes, especially as Persian individuals do not appear to use the definite and indefinite articles correctly.

Moreover, the inferential statistics prove that misunderstanding of definiteness and misuse of definite article, "*The*", is shared by the Persians of both Malaysian and Iranian universities. Since the distribution of the definite article is similar among the two groups of Persians, it could be concluded that studying in Malaysia with English language as the medium of instruction has not improved the use of the definite article among the Persian students studying at Malaysian universities. English language instructors, particularly academic English teachers could make plans for more emphasis of this issue in their syllabi.

In addition, the low level of use of comparatives in the academic writing examined in this study indicates that Persian scholars are not truly informed of the correct employment of comparative features in their scientific works. Comparatives could have played a more efficient role in the referential ties observed in this study since the texts under investigation were academic writings which have natural connections with relations, equations, and comparisons. Therefore, this area needs more attention in both teaching and learning English as a foreign language in Iran and in academic English courses in Malaysian universities.

Based on the results of this investigation, Persian students of Malaysian universities have understood the unique role of "*This*" in academic texts which has been suggested in previous research (Gray, 2010; Biber et al., 1999). *This* and *these* as indicators of textual proximity are often discussed in reference to cohesion in academic prose, perhaps because they are found so frequently in this register "in marking immediate textual reference" (Gray, 2010, p. 169). Concerning the importance of "*This*" in the academic register, the apparent achievement of Persian scholars in Malaysian universities can be a consequence of their closer communication and constant connections with the English language as a scientific register within the international environment. This achievement of the Malaysian group might also be related to the amount of input that they accept via their constant exposure to the

English language in an academic environment (Serratrice, 2007) and in the academic sources that they read in the English language. Furthermore, Persian English learners inside Iran should be acquainted with such structures to increase their academic English proficiency.

ACKNOWLEDGEMENT

We would like to offer our special thanks to Dr. Farhang Koohestanian for his valuable comments and continuous assistance in editing this article.

REFERENCES

Ansarin, A. A. (2004). Nongeneric use of the definite article *the* by Persian learners. *Journal of Faculty of Letters and Humanities. Vol. 47*, 1-11.

Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English.* London: Longman.

Coskun, E., (2011). Cohesion in compositions of Turkish and immigrant students. *Educational Sciences: Theory* and *Practice. Vol. 11*(2), 892-899.

Gardezi, S. A. & Nesi, H., (2009). Variation in the writing of Economics students in Britain and Pakistan: The case of conjunctive ties. In Charles, M., Pecorari, D., Hunston, S. (Eds.). *Academic writing: at the interface of corpus and discourse* (pp. 236- 250). London, New York: Continuum.

Ghoorchaei, B., Tavakoli, M. & Nejad Ansari, D. (2010). The impact of portfolio assessment on Iranian EFL students' essay writing: a process-oriented approach. *GEMA Online® Journal of Language Studies. Vol. 10*(3), 35-51.

Gray, B., (2010). On the use of demonstrative pronouns and determiners as cohesive devices: A focus on sentence-initial *this/these* in academic prose. *Journal of English for Academic Purposes. Vol. 9*, 167-173.

Gray, B. & Cortes, V., (2011). Perception vs. evidence: An analysis of this and these in academic prose. *English for Specific Purposes. Vol. 30*, 31-43.

Gullberg, M., (2006). Handling Discourse: Gestures, reference tracking, and communication strategies in early L2. *Language Learning. Vol. 56*(1) 155-196.

Halliday, M. A. K. & Hasan, R., (1976). *Cohesion in English*. London: Longman.

Halliday, M.A.K. (1994). *An introduction to functional grammar*. 2nd edition. London: Arnold.

Halliday, M.A.K. & Matthiessen C., (2004). *An introduction to functional grammar,* (3rd Ed.). London: Hodder Education.

Hinkel, E., (2001). Matters of Cohesion in L2 Academic Texts. *Applied Language Learning. Vol. 12*(2), 111-132.

Jafarpur, A., (1991). Cohesiveness as a basis for evaluating compositions. *System. Vol. 19,* 459-465.

Jisa, H., (2000). Increasing cohesion in narratives: a developmental study of maintaining and reintroducing subjects in French. *Linguistics. Vol. 38(3*), 591-620.

Kang, J. H., (2009). Referencing in a Second Language: Korean EFL Learners' Cohesive Use of References in Written Narrative Discourse. *Discourse Processes. Vol. 46*, 439-466.

Liu, M. & Braine, G., (2005). Cohesive features in argumentative writing produced by Chinese undergraduates. *System. Vol. 33*, 623-636.

Mc Gee, I., (2009). Traversing the lexical cohesion minefield. *ELT Journal. Vol. 63*(3), 212-220.

Mikhchi, H. H., (2011). Standards of textuality: Rendering English and Persian texts based on a textual model. *Journal of Universal Language. Vol. 12(1)*, 47-74.

Norman, G. J., 2003. Consistent naming in scientific writing: sound advice or shibboleth? *English for Specific Purposes. Vol. 22,* 113-130.

Rayson, P. (2012) Log-likelihood Calculator Website. Retrieved June 17, 2012 from http://ucrel.lancs.ac.uk/llwizard.html

Roth, F. P., Spekman, N. J. & Fye, E. C., (1995). Reference cohesion in the oral narratives of students with learning disabilities and normally achieving students. *Learning Disability Quarterly. Vol. 18*(1), 25-40.

Salehi, H. & Melor Md. Yunus, (2012). The Washback Effect of The Iranian Universities Entrance Exam: Teachers' Insights. *GEMA Online® Journal of Language Studies. Vol. 12*(2), 609-628.

Schleppegrell, M., (2004). *The language of schooling*. London: Lawrence Erlbaum Associates Inc. Publishers.

Serratrice, L., (2007). Referential cohesion in the narratives of bilingual English-Italian children and monolingual peers. *Journal of Pragmatics. Vol. 39,* 1058-1087.

Tardy, C. M., (2005). "It's like a story": Rhetorical knowledge development in advanced academic literacy. *Journal of English for Academic Purposes. Vol. 4,* 325-338.

Wolf, Y. & Walters, J. (2001). Definite articles in the context of literary and scientific writings. *Journal of Pragmatics. Vol. 33,* 965-967.

Zhang, M., (2000). Cohesive features in the expository writing of undergraduates in two Chinese universities. *RELC Journal. Vol. 31*(1) 61-95.

APPENDIX A

A sample of conference papers of this study

Modeling of rapid expansion of supercritical solution (RESS) was carried out applying mass, energy, momentum analogies and appropriate numerical technique for an organic Fluorinated Tetraphenylporphyrin (TBTPP). The results of RESS validated model demonstrated that increasing the pre-expansion temperature produced larger nanoparticles due to its effect on materials agglomeration. On the contrary, higher pre- expansion pressure led to smaller nanoparticles. The numerical data indicated higher cone angle, and smaller diameter of nozzle resulted in smaller particle size. Furthermore, small nanoparticle sizes were obtained applying lower expansion chamber pressure. Numerical results showed that operation of nozzle with addition of a capillary decreased the average nanoparticle size.

INTRODUCTION

Supercritical fluids (SCFs) have been proved to be effective solvents for applications in chemical, petrochemical, pharmaceutical and environmental processes [1-2]. One of the important applications of SCFs as solvent is in the RESS process. RESS is one of the novel, attractive, and relatively simple developing techniques for nanoparticles synthesis [3]. The RESS process consists of the saturation of the supercritical fluid with a solid substrate; then, the depressurization of the solution through a heated nozzle into a low pressure chamber produces a rapid nucleation of the substrate in the form of very small nanoparticles that are collected from the gaseous stream [4].

This process is particularly attractive due to the absence of solvents. Researchers have evaluated RESS for its ability to control particle size, particle size distribution, and product morphology through changes in operating conditions and nozzle geometry [5-8]. Recently, RESS was also used to consistently produce nanoparticles (58±16 nm) of a fluorinated tetraphenylporphyrin such as TBTPP (5,10,15,20-tetrakis(3,5-bis (trifluoromethyl)phenyl)porphyrin) from solutions in CO2 [8]. For organic particles produced via RESS, there is lack of fundamental knowledge on how the physical and chemical properties of the solute affect the particle growth. Therefore, simulation of RESS for the production of TBTPP nanoparticles was the main objective of this research utilizing a mathematical model in order to investigate the effective parameters on the nanosized particle synthesis and design. Optimization of important variables affecting the particle size, with the application of the validated model, eliminates any further time consuming and costly experiments.

MODEL FORMULATION

RESS process has three main units: (1) extraction, (2) preexpansion, and (3) precipitation shown in Figure 1. The development of the mathematical modeling in this study is composed of three sections: (1) the subsonic governing equations in the expansion device, (2) the supersonic jet governing equations in the expansion chamber, and (3) the governing equations accounting for nucleation, condensation and coagulation of nanosized particles in the RESS process. The subsonic governing equations to calculate the flow field in the expansion device are the mass, momentum, and energy balances. In this study, the thermodynamic properties of the solvent (CO2) are described by the Peng-Robinson equation of state. The modeling can be performed considering only the pure solvent due to low solute concentrations. As already demonstrated by various researchers, the Peng-Robinson equation of state predicts the fluid properties even in the supercritical region very well, whereas other cubic equations of state cannot be recommended for SCF calculations [5].

The compressible stream enters and leaves the nozzle with subsonic and sonic velocities, respectively. In other words, the velocity of fluid entering the expansion chamber approaches supersonic at Mach number (Ma) equal to one and the supersonic jet wave prolongs up to a downstream shock wave that is actually the Mach disk. As flow passes through the Mach disk, which is essentially of zero thickness, supersonic flow is transformed into subsonic flow. The shape of the supersonic free jet is assumed to be conical and the Mach number in the jet length is calculated according to an Equation based on experimental data [9]. Since the operating conditions of the nozzle effluent was assumed to be adiabatic and ideal gas with constant heat capacities ratio, ? ? C p Cv , therefore it is possible to utilize the isentropic compressible fluid governing equations for the determination of jet properties [10]. Knowing the T, P, and ? at the nozzle exit from the calculation of operating condition profiles inside the nozzle, the stagnant temperature, pressure and density at the expansion chamber entrance (Ma=1) is obtained.

This procedure is repeated for the calculation of jet properties up to the Mach disk that a shock wave occurs. Since shock wave is part of compressible flow, thus, the continuity, momentum, the first and second laws of thermodynamic in conjunction with equation of state which are governing the compressible fluid is also applicable to the shock wave. Consider that a supersaturated homogeneous solution is flowing through a smooth duct containing no solid impurities either in the fluid or on the inner walls, precluding the possibility of heterogeneous nucleation. Whenever the equilibrium mole fraction of a solute is lower than its mole fraction, the difference between the actual state of the solution which is usually metastable and the equilibrium state provides a driving force for the process of precipitation, namely, homogeneous nucleation and condensation. The solute equilibrium mole fraction for the specific organic fluorinated tetraphenylporphyrin (TBTPP) which is used for model validation of this study can be expressed as a function of operating pressure and temperature in a correlation developed by Sane and Thies [8]. The computer program developed for modeling the RESS process is composed of two main programs which calculate the particle diameter in the nozzle and expansion vessel. The numerical procedures using the modified 4th-order Rung-Kutta and Newton-Raphson methods to calculate the particle diameter in the nozzle and in the expansion chamber, respectively.

RESULTS AND DISCUSSION

In order to investigate the model authenticity, the model predictions were compared with the experimental results [8] obtained for an organic compound, TBTPP, which has various applications with diameter less than 400 nm such as catalyst, adsorption, and solar cells [11]. As shown in Table 1, in view of the close compatibility obtained between the model predictions with experimental measurements (average relative error (ARE) =6.1%) for the average particle diameter, it can be concluded that the developed model is reliable for nanoparticle diameter prediction at low concentration of TBTPP in supercritical CO2. Therefore, this model was used to investigate the effective variables on size design of nanoparticles. The effect of nozzle length on particle diameter at different temperatures is studied via the validated model. The model prediction shows that decreasing the temperature reduces the particle diameter.

The particle diameter curves have an increasing trend up to a maximum value and beyond that a gradual decreasing profile. This model prediction is useful in optimization of pre-expansion temperature and nozzle length. Thus, it seems that lower temperature and longer nozzle length favors the formation of particles with smaller diameter. This may explain the necessity of addition of a capillary after the nozzle in order to further reduce the particle size before the expansion vessel inlet. The diameter variation in the recovered final nanosized particles in the expansion vessel due to different pre-expansion temperatures and vessel residence time is studied utilizing the validated model.. The lower temperatures reduce the particle diameter and longer residence times increase the final particle diameter. This clearly indicates that in the expansion vessel the coagulation is mainly controlling mechanism and major factor for the formation of larger particles as residence time increases. The effect of nozzle length on particle diameter at different pressures is studied by the validated model.

The model prediction indicates that increasing the pressure reduces the particle diameter. The particle diameter curves have an increasing trend at the beginning of the nozzle which is due to condensation and then a constant profile is observed. The steady trend in particle diameter may be explained because of prevailing effect of nucleation over condensation. The effect of applying different heat flux in the nozzle on the variation of particle diameter is predicted by the validated model. The profiles have very close and compatible trends which is the indication of negligible heat transfer effects. It is noted that the profiles of adiabatic, isothermal and two nonisothermal conditions are coincided at 0.135 mm nozzle length. To provide heat transfer into nozzle may be necessary in order to avoid Joule-Thomson effect to prevent freezing of CO2 which may lead to clogging the nozzle bottle neck. The effect of nozzle geometric configuration at different expansion chamber residence time is studied on particle size via the validated model..

Modeling predictions show that increasing the nozzle diameter adversely affects the particle size. Increasing nozzle diameter from 0.025 to 0.2 mm changes the profile of particle diameter versus the expansion vessel residence time in which shorter residence time is required to obtain particle diameter of 100 nm. For instance, at the residence time of 4 s, the particle diameter of 30, 40, 60, and 100 nm are obtained for the corresponding nozzle diameters of 0.025, 0.05, 0.1, and 0.2 mm, respectively. In other words, bigger nozzle diameter causes a combined condensation and nucleation with production of increased nucleus diameter as a function of nozzle length.

Finally, after a short expansion chamber residence time, the nanosized particles with increased d p are recovered in view of controlling mechanism of coagulation in the expansion vessel. Therefore, these results suggest that smaller nozzle diameter creates operating conditions in which nanosized particles with reduced diameter are obtained. The effect of expansion vessel pressure on particle diameter is investigated as a function of expansion chamber residence time by the validated model. The numerical results clearly demonstrate that lower pressure reduces the particle diameter. At higher pressures, the D p profiles have a sharp increasing slope whereas at low pressures the profile is still increasing with a moderate slope. As a case in point, at the residence time of 2 s, the particle diameter of 17,28,35,52, and 90 nm are obtained for the corresponding expansion vessel pressures of 0.1, 0. 5, 1.0, 3.0, and 6.0 bar, respectively. Thus, it is concluded that lower pressure favors the production of nanosized particles with much reduced diameter. Lowering the pressure from 6.0 to 1.0 bar reduces the particle size by 61%.

CONCLUSION

In order to avoid the very expensive and time consuming experimental studies of nanoparticles synthesis and size design, the development of a comprehensive RESS modeling was carried out to investigate and optimize the effective variables on particle diameter. The authenticity of the model was examined via the comparison of numerical and TBTPP experimental data in which the obtained very small deviation was the indication of model reliability. The numerical data predicted by the model indicated that (1) lower pre- expansion temperature, (2) longer nozzle length, (3) addition of capillary after the nozzle, (4) shorter expansion vessel residence time, (5) higher pre-expansion pressure, (6) smaller nozzle diameter, (7) lower expansion vessel pressure are appropriate conditions for the production of TBTPP nanoparticles with smaller diameter in the RESS process.

APPENDIX B

References (Halliday, 1994, p. 313)

(1) Personals	**Head**			**Deictic**
Function / Class	**Determinative**		**Possessive**	
Singular	**Masculine**	he/him	his	his
	Feminine	she/her	hers	her
	Neuter	it	[its]	its
Plural		they/them	theirs	their

(2) Demonstratives				
Class / Function		**Head**	**Deictic**	**Adjunct**
Specific	**Near**	this/these	this/these	here (now)
	Remote	that/those	that/that	there(then)
Non-specific		it	the	

(3) Comparatives				
Class / Function		**Deictic/ Numerative**	**Epithet**	**Adjunct/ Submodifier**
General	**Identity**	same, equal, identical and c.		identically, (just) as and c.
	Similarity	similar, additional and c.	such	so, likewise, similarly, and c.
	Differences	other, different and c.		otherwise, else, differently and c.
Particular		more, fewer, less, further and c.; so, as and c.+numeral	bigger and c.; so, as, more less and c. + adjective	better and c.; so, as, more, less and c. + adverb

ABOUT THE AUTHORS

Sahar Naderi is a PhD candidate at the School of Language Studies and Linguistics, Faculty of Social Sciences and Humanities, University Kebangsaan Malaysia. Her main research interest is the writing skills of Persian EFL learners.

Yuen Chee Keong (Ph.D) is a senior lecturer at the School of Language Studies and Linguistics, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. His main research interests are written Discourse Analysis, Varieties of English and Gender Studies.

Hafizah Latif (Ph.D) is a senior lecturer at the School of Language Studies and Linguistics, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. Her main research interests are Applied linguistics, Genre Analysis, and Literacy.