

CHAPTER IV

RESULTS AND DISCUSSION

4.0 Introduction

This chapter provides the findings and discussions over the results obtained through both qualitative and quantitative method of data analysis. For the first research question which involves the qualitative approach, the findings are presented in the form of tables and discussions by highlighting the prominent language samples. As for the second research question, the descriptive and inferential analysis performed on the scores achieved by the samples in both groups (i.e. experimental and control group) are presented for the English and Bahasa Malaysia (BM) pre-test, mid-test and post-test.

4.1 Qualitative Data Analysis (Research Question 1)

There were ninety grammar items (i.e. four demonstratives and forty-six quantifiers for English and two demonstratives and thirty-eight quantifiers for BM) which were tested on the samples during pre-test, mid-test and post-test along the process of data collection. Based on the invariant meaning analysis, all these determiners were grouped into a few sub-groups according to their functions and these items (i.e. English and BM) were also found their possible counterparts.

4.1.1 The Groups of English and BM Demonstratives and Quantifiers

The groups of demonstratives and quantifiers of English determiners and their counterparts in BM are shown below (Table 4.1.1.1). The quantifiers are divided into nine groups (i.e. partitives / classifiers, indicators of large entity, indicators of small

entity, cardinal numbers, indicators of fractions, indicators of individual entity, indicators of the whole entity, indicators of optional entity and indicators of zero entity). Nevertheless, there are another three quantifiers (i.e. another, enough and twice) which do not have any similar characteristics or properties to be included in any of the groups mentioned and hence, they occur independently.

Table 4.1.1.1: The Groups of English and BM Demonstratives and Quantifiers

No.	English Determiners	Bahasa Malaysia Determiners
A.	Demonstratives	Demonstratives
1.	This	<i>Ini</i>
2.	That	<i>Itu</i>
3.	These	-
4.	Those	-
B.	Quantifiers	Quantifiers
PARTITIVES / CLASSIFIERS		
1.	A piece of	<i>Sekeping</i>
2.		<i>Shelai</i>
3.	A slice of	
4.	An item of	
5.	-	<i>Sebiji</i>
6.	-	<i>Seorang</i>
7.	-	<i>Seseorang</i>
8.	-	<i>Sebuah</i>
9.	-	<i>Sebatang</i>
10.	-	<i>Seekor</i>

Table 4.1.1.1, continued

INDICATORS OF LARGE ENTITY		
11.	Hundreds of	<i>Ratusan</i>
12.		<i>Beratus-ratus</i>
13.	Thousands of	<i>Ribuan</i>
14.		<i>Beribu-ribu</i>
15.		<i>Jutaan</i>
16.		<i>Berguni-guni</i>
17.	Many	<i>Banyak</i>
18.		<i>Para</i>
19.		<i>Ramai</i>
20.	A large number of	
21.	A large amount of	
22.	A great number of	
23.	A great deal of	
24.	The majority of	
25.	An abundance of	
26.	Plenty of	
27.	A lot of	
28.	Lots of	
29.	Much	
30.	More	
31.	Most	
32.	Numerous	
33.	Various	<i>Pelbagai</i>
INDICATORS OF SMALL ENTITY		
34.	A little	<i>Sedikit</i>
35.	A bit of	
36.	Less	
37.	Least	
38.	Some	<i>Sesetengah</i>
39.	Several	<i>Beberapa</i>

Table 4.1.1.1, continued

40.	A few	
41.	Fewer	
42.	Fewest	
43.	A couple of	
44.	A number of	
CARDINAL NUMBERS		
45.	One	<i>Satu</i>
46.	Two	<i>Dua</i>
47.		<i>Dua puluh</i>
48.		<i>Tiga ratus</i>
49.		<i>Sepuluh ribu</i>
50.		<i>Sejuta</i>
INDICATORS OF FRACTIONS		
51.	Two-thirds	<i>Dua pertiga</i>
52.	Half	<i>Setengah</i>
53.		<i>Separuh</i>
INDICATORS OF INDIVIDUAL ENTITY		
54.	Each	<i>Tiap-tiap</i>
55.	Every	<i>Setiap</i>
56.		<i>Masing-masing</i>
INDICATORS OF THE WHOLE ENTITY		
57.	All	<i>Semua</i>
58.		<i>Segala</i>
59.		<i>Sekalian</i>
60.		<i>Seluruh</i>
61.	Both	<i>Kedua-dua</i>
INDICATORS OF OPTIONAL ENTITY		
62.	Any	-
63.	Either	-

Table 4.1.1.1, continued

INDICATORS OF ZERO ENTITY		
64.	Any	-
65.	Neither	-
66.	No	-
67.	Another	-
68.	Enough	-
69.	Twice	-

4.1.2 The Analysis of Invariant Meaning

The invariant meaning of the demonstrative determiners and quantifiers in both languages (i.e. English and BM) was identified by employing the Entity Number System (Reid, 1991; Tobin, 1990). A detailed analysis of the noun entities in the language samples which utilises the Entity Number System is revealed in appendices for further reference (see Appendix, page 232 – 314).

4.1.2.1 Demonstratives

The identification of the invariant meaning of the demonstratives (i.e. this, that, these, those, *itu* and *ini*) depends on the noun head which co-occurs with these words. The grammatical number analysis (i.e. the Entity Number System) proposed by Tobin (1990) and Reid (1991) which explains the signals ‘-Ø’ and ‘-s’ as ‘ONE’ and ‘MORE THAN ONE’ entity is in some way adequate to be applied to the postulation of invariant meaning of the demonstrative determiners in terms of its use for either singular or plural referents. However, the Entity Number System is not applicable to disclose one of the salient functions of the demonstratives which is to indicate the

proximity of the noun referents. Hence, the reference to the context of its occurrence is helpful in explaining the proximity of the noun referent, either “proximal” or “distal.” The invariant meaning postulation for the demonstrative determiners is shown below through its deployment in various types of written discourse.

[1a] [NP **This** newspaper] believes that the solution to almost any problem is to publish more information rather than less.

(The Independent, August 21 2009)

[1b] It was only earlier [NP **this** week] that Mr Cameron was condemning in tones of high moral outrage the profligacy of the Labour Government in managing the public finances.

(The Independent, August 21 2009)

[1c] Thus one of the more pressing public policy issues to arise from the outbreak of swine flu phobia is that of ensuring that drug companies are restrained from profiteering, as we report on page 14.....There also remains the abiding risk that [NP **this** virus] or a bird flu virus could mutate to a more aggressive form - but that threat is no greater now than it has been for many years.

(The Independent, July 26 2009)

[1d] I pause, and think of the vast camps in Sonapur, just a few miles away. Does he even know they exist? He looks irritated. “You know, if there are 30 or 40 cases [of worker abuse] a year, that sounds like a lot but when you think about how many people are here...” Thirty or 40? [NP **This** abuse] is endemic to the system, I say.

(The Independent, April 7 2009)

Sentences [1a], [1b], [1c] and [1d] above indicate the function of ‘this’ as a demonstrative determiner which denotes the singular proximal referent. The grammatical number analysis proposed by Tobin (1990) and Reid (1991) which highlights the presence of ‘ONE’ and ‘MORE THAN ONE’ entity shows that the noun head ‘[1a] newspaper-Ø’, ‘[1b] week-Ø’ and ‘[1c] virus-Ø’ are singular nouns (which means ‘ONE’). This is realised through the occurrence of entity-Ø. The demonstrative determiner ‘this’ in all the instances above denotes a proximal referent. However, some distinctive features were found throughout the analysis of a few language samples. For instance, in sentence [1b], the demonstrative determiner which represents the proximal referent too denotes the emphasis on the current situation (i.e. event) which is being referred to. On the other hand, [1c] highlights the function of ‘this’ as denoting the aforementioned referent; hence ‘[1c] this virus’ refers to the ‘swine flu’ which is discussed in a few previous lines (of the paragraph). In addition, ‘this’ too functions to explain the proximity of the uncountable noun (i.e. mass referent) as in sentence [1d]. The Entity Number for ‘abuse’ is realised as ‘ONE’ through the presence of the zero entity (i.e. abuse-Ø). Hence, this word functions as a singular but uncountable referent as ‘abuse’ is defined as ‘unfair, cruel or violent treatment of somebody’. In the example [1d], ‘this abuse’ is referring to the ‘worker abuse’ as the aforementioned referent in the paragraph.

[2a] The world will have another three billion mouths to feed within the next five decades. It therefore makes sense to review the options by which the planet secures its food supplies. Genetically-modified crops, as the Government yesterday suggested, are one major option. Many in the environmental movement respond to [NP **that** idea] with outright opposition.

(The Independent, August 11 2009)

[2b] Any debate about increased production will touch on genetic modification.
[_{NP} **That** *debate*] must distinguish between the different uses to which this technology can be put: it is one thing to produce GM grain that is drought resistant; quite another to produce "suicide seeds", or crops that cannot self-reproduce.

(The Independent, August 9 2009)

Both language samples above (i.e. 2[a] and 2[b]) indicate the function of 'that' as a demonstrative determiner which denotes singular and uncountable distal referent respectively. The referents '[2a] idea-Ø' and '[2b] debate-Ø' both disclose 'zero entity' through its analysis of Entity Number which carries the meaning of 'ONE'. The word '[2a] idea' in this context is perceived as 'a plan' (i.e. singular referent) which is referring to the aforementioned referent (i.e. genetically-modified crops) whereas '[2b] debate' is perceived as a mass referent as it refers to 'any sorts of discussion'.

Although 'this' and 'that' denote singular and uncountable referents, there is a tendency in using these two words alternatively to indicate the proximity of the noun referents as hearers (i.e. readers) might interpret the proximity of the noun referent in a very different way. The idea of replacing 'that' with 'this' is still logical (which means acceptable in [2a]) but here the word 'yesterday' implies that the idea discussed is somewhat uttered the day before which indirectly connote the understanding of distal referent. For [2b], 'that' is not possibly replaced with 'this' as the aforementioned referent refers to 'any debate' which is rather indefinite.

[3] There are currently 165 young people serving sentences in secure children's homes out of a total of 2,500 offenders under the age of 18 in prison. Most are sent to young offenders' institutions which are modelled more closely on adult prisons.... [NP **These** *institutions*] are set up to work specifically with young people who have holistic needs not just offending ones..... "Our responsibility is to make sure they go into the most appropriate placement that meets [NP **these** *needs*]."

(Brown, J., *The Independent*, August 9 2009)

[4a] Our health authorities have learned a great deal since [NP **those** *days*].

(*The Independent*, August 10 2009)

[4b] "Browsing is the activity subsumed in the direct shelf approach whereby materials arranged for use in a library are bed in the reasonable expectation that desired or valuable items or information might be found among **those** materials as arranged on the shelves!"

(*Data extracted from corpus*)

'These' and 'those' in the instances above can be seen occurring only with plural referents which means 'MORE THAN ONE' entity (i.e. Entity-s) such as '[3] institution-s', '[3] need-s', '[4a] day-s' and '[4b] material-s'. In prescriptivists' view, 'these' and 'those' are always regarded as the plural form of 'this' and 'that' respectively. This means that 'these' functions to denote plural proximal referent whereas 'those' is used to denote plural distal referent. In addition, 'these' in '[3] these institutions' and '[3] these needs' both refer to the aforementioned referents which are '[3] young offenders' institutions' and '[3] holistic needs'.

Discussing on [4a], 'those' in this example occurs to indicate referents in the past (i.e. distal) whereas in [4b], 'those' refers to the aforementioned referents (i.e. materials arranged for use in a library). The demonstrative determiner 'those' in [4b] is replaceable with 'these' as both indicate the plurality of the noun referent as the

aforementioned referent (i.e. materials arranged for use in a library) which is perceived as far from the speaker (i.e. the writer) may not be perceived the same way by the hearer (i.e. the reader). These demonstrative determiners do not by any chance occur with mass referents as uncountable nouns take a signal which indicates ‘zero entity’ (i.e. ONE).

[5a] *Modal insan yang cemerlang bermakna [NP individu **itu**] turut mahir dalam membuat keputusan, berakhlak dan bermoral tinggi, berani, amanah, jujur, bekerjasama dan bertanggungjawab.*

(Marzita Abdullah, *Utusan Malaysia*, May 12 2009)

[5b] *Ini kerana pada tahun 70-an, Amerika menubuhkan perpustakaan Lincoln Cultural Centre di Kuala Lumpur. Begitu juga dengan Britain yang menyediakan perpustakaan British Council Libya melalui perpustakaan Libyan Arab Cultural Centre. Kesatuan Soviet pula mendirikan perpustakaan Soviet Cultural Centre. Dari [NP perpustakaan-perpustakaan **itu**], penulis dapat memahami apa yang dikatakan demokrasi, kapitalisme, sosialisme, nasionalisme dan komunisme.*

(Zin Mahmud, *Utusan Malaysia*, April 19 2009)

[5c] *.....penulis ingin merakamkan ucapan terima kasih kepada Mahmud Elias kerana mematuhi satu arahan jeneralnya yang amat penting pada Januari tahun 1960. Ketika itu, Mahmud telah mendaftarkan anaknya dalam darjah satu di Sekolah Rendah Kebangsaan Polis Depoh. Sebaiknya diketahui [NP perkara **itu**], ketuanya dengan serta merta mengarahkan supaya Mahmud memindahkan sekolah anaknya ke Rifle Range Road School, sebuah sekolah jenis kebangsaan Inggeris (SJKI) baru ditubuhkan pada [NP tahun **itu**] oleh kerajaan dan terpaksa menumpang di sekolah kebangsaan.*

(Zin Mahmud, *Utusan Malaysia*, April 19 2009)

Unlike English, the demonstrative determiners in BM occur as post-modifiers of the noun referent. The Entity Number System which was employed to the grammatical number analysis of the BM noun referents indicate that the demonstrative determiner ‘*itu*’ occurs as a post modifier for both singular referent (i.e. ‘[5a] *individu-Ø*’) and plural referent (i.e. ‘[5b] *perpustakaan-perpustakaan*’). The reduplication of the noun head in BM is an indicator of plurality, and hence, this referent is referred as Entity-Entity (which means ‘MORE THAN ONE’). This is different than that of English where plurality (more than one entity) is identified by the occurrence of the signal ‘-s’.

‘*Itu*’ in [5a] is recognised as denoting ‘an unidentified individual’ and therefore, inappropriate to be replaced with ‘*ini*’. Moreover, [5b] reveals the function of this demonstrative determiner to denote referents in the past (which means distal referent) whereas in [5c], this demonstrative functions to denote the aforementioned referents (i.e. ‘*perkara itu*’ refers to ‘*Mahmud telah mendaftarkan anaknya dalam darjah satu di Sekolah Rendah Kebangsaan Polis Depoh*’ and ‘*tahun itu*’ refers to ‘1960’). This demonstrative is also found to be occurring with animate noun (i.e. *individu*) and inanimate noun (i.e. *perpustakaan-perpustakaan*, *perkara* and *tahun*). Thus, the invariant meaning of ‘*itu*’ is realised as the demonstrative which denote the distal (far) as well as the aforementioned referent (i.e. singular / plural animate and inanimate noun).

[6a] *Penganjuran kali ketiga PABM [NP tahun **ini**] yang berlangsung sejak 2 Mac dan berakhir [NP hari **ini**] menarik penyertaan seramai 46 orang peserta dari 28 negara di enam benua.*

(Mohd Khuzairi Ismail, *Utusan Malaysia*, March 6 2009)

[6b] *Terserahlah kepada manusia yang menjadi watak utama di pentas [NP dunia **ini**] untuk melakonkannya.*

(Hassan Mohd Noor, *Utusan Malaysia*, March 9 2009)

[6c] *Anak-anak tentunya ketagihan gajet. Daripada komputer, laptop, Play Station, i-pod dan i-phone, jendela mereka kepada dunia jauh lebih luas....Tetapi mereka bukan saja tidak meminati membaca, tetapi kurang mencinta ilmu. Apa yang mereka gemari ialah permainan komputer..... [NP Anak-anak **ini**] juga tidak cukup memiliki kesabaran untuk duduk dan menulis. Mereka hanya cut and paste. Tetapi ada antaranya gemar membuat blog, selain daripada menonton YouTube dan aktif dalam Facebook.*

(Zin Mahmud, *Utusan Malaysia*, April 19 2009)

[6d] *Pada [NP Khamis **ini**], 23 April ialah Hari Buku Sedunia. Sempena hari bermakna itu, penulis ingin merakamkan ucapan terima kasih kepada Mahmud Elias kerana mematuhi satu arahan jeneralnya yang amat penting pada Januari tahun 1960.*

(Zin Mahmud, *Utusan Malaysia*, April 19 2009)

The language samples above indicate the function of ‘*ini*’ as to denote proximal referent. In [6a] and [6b], this demonstrative determiner is used to denote emphasis on the present situation (which means proximal). It is evident that in these sentences, ‘*ini*’ is irreplaceable with ‘*itu*’ as it signals the existing event. For [6d], ‘*ini*’ is utilised to disclose the future event (which in other words also means present situation). Discussing on [6c], the function of ‘*ini*’ is realised as indicating the aforementioned referent ‘*anak-anak*’ which is discussed earlier in the paragraph. Although this function is similar to ‘*itu*’ in [5c], this demonstrative determiner (i.e. ‘*ini*’) is more appropriate compared to ‘*itu*’ in this context as the writer poses an emphasis on the present situation

but not referring to an event or referent which has occurred in the past. In addition, the use of '*ini*' is also identified as a demonstrative that makes the readers to feel involved or be part of the event which is being referred to.

The demonstrative determiners in English and BM albeit denoting more than a function (as discussed above), all these meanings are not always applicable in each of its occurrences in any written discourse. 'This', 'these' and '*ini*' are not only indicating the proximal referents but in some instances, they are used by the writers to highlight the existing event or situation to leave an impact to the readers to be involved in the situation which is being discussed. On the other hand, 'that', 'those' and '*itu*' although referring to distal referents, these words also serve to indicate event(s) which has taken place in the past and moreover, it also refers to unidentified referent(s).

When these points of view are approached more meticulously, it is prominent to highlight that the function of 'this', 'these' and '*ini*' which makes the readers to feel involved (which means near / close to the writer / reader) to the existing event (which also means near / close) discloses these demonstratives' semantic function as to denote proximal (near) referent. Likewise, 'that', 'those' and '*itu*' which are used to denote event(s) which has occurred in the past (which means far from the writer / reader) and also to indicate unidentified or rather indefinite referent(s) (which also means far from the writer / reader) reveals these demonstratives' semantic function as to denote distal (far) referent.

As such, although there are some distinctive features identified in the context of occurrence of the demonstratives in English and BM, the undisputed or universal meaning of these demonstratives is to indicate singular / plural proximal (near) or singular / plural distal (far) noun referent. The various meanings of the demonstratives in any languages could just be a case of semantic expansion (Chen, 1990), while the indicators of proximal and distal noun referents are their invariant meanings.

4.1.2.2 Quantifiers

The postulation of invariant meaning for the quantifiers in English and BM too depends on the noun head that co-occurs with these grammatical items. Quantifiers function to indicate the number of noun entity and these numbers, according to Tobin (1990:81) are associated with “countability” or “enumeration” of the noun entities. Hence, these nouns are distinguished with the “singular” versus “plural” value with ‘-Ø’ (zero) and ‘-s’ signals that signify ‘ONE’ and ‘MORE THAN ONE’ entity respectively (Reid, 1991:46; Tobin, 1990:81).

As mentioned earlier (see section 2.9.1, page 43), unlike English, the nouns in BM are not inflected to indicate plurality. Therefore, the complete reduplication of the noun head is the signal which denotes the meaning of ‘MORE THAN ONE’ entity and at the same time, the use of numerals (more than one) with classifiers too signify ‘MORE THAN ONE’ entity of the BM nouns which are not reduplicated such as ‘*dua ekor gajah*’ (tr. two elephants). It is ungrammatical if the numeral with classifier co-occurs with the noun head which has undergone reduplication such as ‘*dua ekor gajah-gajah*’. However, this is different in English where the meaning of ‘ONE’ or ‘MORE THAN ONE’ of the noun entity and the determiners which precede these nouns are indicated concurrently. For instance, in the noun phrase ‘two elephants’, ‘-s’ signifies ‘MORE THAN ONE’ entity that simultaneously signifies the meaning of ‘two’ which is also ‘MORE THAN ONE’ entity.

4.1.2.2.1 Partitives / Classifiers

Partitives in English language serve to indicate the quantity of mass referents whereas classifiers in BM are used to present the category of noun referent which co-occurs with numerals. However, the use of these quantifiers depends on the

characteristics or properties of the noun referent (i.e. not only countable or uncountable but also its physical attributes) which co-occur such as the instances discussed below.

4.1.2.2.1(a) A piece of, a slice of, an item of, *sekeping* and *sehelai*

The postulation of invariant meanings for the grammatical items above is discussed such as follows:

[7a] However, the great advantage of a good video is that you can actually witness the process of developing [NP **a piece of** *work*], stage by stage, and be shown individual techniques, as well as be informed and entertained.

(Data extracted from corpus)

[7b] As [NP **a piece of** *poetry*], it seems a fairly conventional summoning of royal emblems.

(Data extracted from corpus)

[8a] You will need [NP **a slice of** brown or white bread *butter or cheese*].

(Data extracted from corpus)

[8b] It was Phillips' 13th minute shot which allowed the Canaries to close in on the leaders, although there was more than [NP **a slice of** *luck*] about it as the ball hit Nick Henry before bouncing over the stranded Oldham keeper Paul Gerrard.

(Data extracted from corpus)

From the analysis, it was identified that 'a piece of' is a type of partitive which is used to quantify the mass referent (i.e. uncountable noun). The Entity Number System defines the noun referents as '[7a] work-Ø', and '[7b] poetry-Ø'. The zero

signal which indicates ‘ONE’ entity is not only applicable for count referents that is singular but also mass referents although these referents are not fixed with any discrete boundaries (Reid, 1991). ‘Work’ in this context of reference posits the meaning of ‘a product or result of work’ which is not identified as countable item(s). In addition, the morphological identity in ‘poetry-Ø’ signals the value of ‘ONE’ entity (i.e. mass referent) for the ‘collection of poems’ as unbounded referent. As suggested by Wierzbicka (1985) cited in Reid (1991:70) through her findings, “mass nouns designate objects whose shapes are not cognitively salient.” Hence, in most of the instances, the presence of ‘a piece of’ is only salient in quantifying the mass referent which carries the meaning of ‘ONE’ entity. As such, the invariant meaning of this partitive is realised as ‘a single item of uncountable noun’.

Discussing on another type of partitive that is ‘a slice of’, the semantic properties of the noun referents which co-occur with this quantifier is rather similar to that of ‘a piece of’. However, some distinctive features were found through the analysis of invariant meaning where ‘a slice of’ emphasises on the size of the noun referent as a small portion (i.e. much smaller than the quantity of ‘a piece of’). For instance, in [8a], the meaning of ‘a slice of butter’ is realised as a small (i.e. thin) piece of butter (i.e. butter-Ø) as butter is more likely to be realised as possessing a physical discrete boundary which can be divided into a few portions. Although ‘butter’ consists of the physical properties of a count noun (i.e. physical discrete boundary), it is employed as a mass noun (Reid, 1991:67). ‘A slice of’ is replaceable with ‘a piece of’ as in [8a] and [8b] but it is not suitable for ‘a slice of’ to serve as a substitute for ‘a piece of’ as in [7a] and [7b]. The noun referent ‘luck- Ø’ is always identified as uncountable. Hence, the invariant meaning of ‘a slice of’ is realised as ‘a small portion of uncountable noun’. The use of ‘a small portion of (i.e. a slice of) work or poetry is not suitable but ‘a piece of butter’ is applicable as it may refer to a bigger portion or size of butter than the one

which is usually identified in slices. Moreover, ‘a piece of luck’ is also common to suggest the amount of luck which is unexpectedly better.

[9a] The argument runs as follows – when you enjoy [_{NP} **an item of** *food*] you search for another one like it, only accepting an alternative if you are unsuccessful.

(Data extracted from corpus)

[9b] He didn’t bring even [_{NP} **an item of** *clothing*] for the stay.

(Data extracted from corpus)

‘An item of’ is most commonly used with mass referents such as ‘food’ as in [9a] and ‘clothing’ as in [9b]. The accompanying number choice with ‘food’ which is ‘-Ø’, suggests its conceptual definition as ‘ONE’ entity (i.e. mass referent which means common thing that people or animal eat) but ‘food-s’ refers to the types of food where ‘-s’ signals the meaning of ‘MORE THAN ONE’ entity. At the same time, ‘clothing-Ø’ refers to ‘ONE’ entity (i.e. mass referent) where it indicates the types of clothes. As they are always used, ‘furniture’ and ‘clothing’ can never occur with an ‘-s’ to indicate plurality. This leads to an argument that it is impossible, as ‘food’ is frequently seen occurring with an ‘-s’ to indicate ‘MORE THAN ONE’ entity. The question raised here is that, if ‘foods’ refer to its type, presumably, ‘furnitures’ and ‘clothings’ should also be referring to their types but these words do not occur in any of the instances of their use. The idea of Wierzbicka (1985) cited in Reid (1991:70) which suggests that a noun referent is countable when it consists of “cognitively salient shapes” and therefore, the noun referent “cannot be counted together” when a noun comprises “objects of different kinds” is perhaps applicable.

The reason for ‘furniture’ and ‘clothing’ which is only morphologically identified as ‘furniture-Ø’ but not ‘furniture-s’ and ‘clothing-Ø’ but not ‘clothing-s’, is

perhaps due to the fact that ‘furniture’ by itself indicates the combination of objects of different kinds (which can be specifically named) whereas ‘clothing’ is conceptualised as different types of wear (i.e. ties, shirts, skirts, pants, scarves, etc.) which are called the “non-taxonomic categories” where they “share no similar form” but only “general similarity of purposes” and hence, identified as singular (Wierzbicka, 1985 cited in Reid (1991:71). In line with these justifications, it is realised that ‘food’ by itself is not referring to its type as ‘furniture’ and ‘clothing’ as it refers to something which is ‘edible in order to survive’ and therefore, there is a need for the occurrence of entity-s to indicate its type. Thus, the invariant meaning of ‘an item of’ is realised as ‘a type of uncountable noun’ and subsequent to that, ‘an item of’ may also occur with ‘furniture’ which results in ‘an item of furniture’.

Wierzbicka (1985) cited in Reid (1991:67) highlights that the physical characteristics of objects (i.e. size, shape and type) influences the way these objects are classified linguistically. As such, the identification of the semantic properties of a referent whether count or mass is perhaps highly subjective as it depends on how these referents are being categorised by the observer in the speech community. Nevertheless, Reid (1991:73) opined that the enumeration system for a noun referent is always mechanical and objective as in order to perceive a noun as a countable referent, the objects ought to be “sufficiently similar” which means neither “too similar” (i.e. individual grains of rice) nor “too dissimilar” (i.e. a table and a chair).

Reid’s (1991) view on enumeration leads to a conclusion that things which consist of several identical individual entities such as ‘rice’, ‘sugar’, ‘salt’ and ‘water’ and things which comprise several non-identical individual entities such as ‘furniture’ (which consists of tables, chairs, cupboards, etc.) are uncountable. This means that these nouns are always singular as they are too similar (i.e. rice, sugar, salt and water) and too dissimilar (i.e. tables, chairs, cupboards, etc.). Nonetheless, despite being singular, the

mass nouns (i.e. sugar, salt, water) are also being utilised as plural referents in speech community such as ‘sugars’ (i.e. fruit sugars, simple sugars such as glucose and fructose), ‘salts’ (i.e. mineral salts, bath salts, quinine salts) and waters (i.e. arctic waters, Nile waters) which refer to their types.

Another argument which follows is that, when ‘foods’, ‘sugars’, ‘salts’ and ‘waters’ denote the entity types, the chances to encounter ‘rices’ in any linguistic data is presumably greater too as it falls under the category of unstructured mass as ‘sugar’ and ‘salt’. Surprisingly, ‘rices’ do not occur in any of the instances to refer to its type. This mass noun only allows enumeration when partitives are applied such as ‘a plate of rice’, ‘two bowls of rice’ and ‘many packets of rice’. The case of ‘sugars’, ‘salts’, ‘waters’ and ‘rices’ as mentioned above seems to serve as a dispute to Reid’s (1991) principle which states that items which are too similar and too dissimilar are not entitled for enumeration. Perhaps, Reid’s (1991) idea on enabling enumeration on items which are sufficiently similar is able to resolve the confusion but again, the absence of ‘rices’ in any linguistic data is still seen as unresolved. Moreover, the interpretation over a noun referent which is “sufficiently similar” is considerably subjective as things which are perceived as “too similar”, “sufficiently similar” or “too dissimilar” through ones observation, may not be perceived so by another in the speech community. As a result, it is indeed important to underline that the interpretation of the semantic value of a noun referent can only be resolved by context in which the meaning is being communicated.

[10a] *Pada 1991 saya terpilih sebagai Juara Perkhidmatan Cemerlang bagi Kontinjen Pulapol dan menerima sijil serta [NP sekeping cek] bernilai RM150 daripada Ketua Polis Negara.*

(Data extracted from corpus)

[10b] *Sebagai tambahan, setiap keluarga yang ditempatkan semula akan diberikan [NP **sekeping** tanah] untuk membolehkan mereka bercucuk tanam.*

(Data extracted from corpus)

[11a] *Hanya [NP **sehelai** kain rentang] di depan pintu Dewan Auditorium P.Ramlee menjadi sandaran seolah-olah mahu orang di situ sahaja yang menonton.*

(Data extracted from corpus)

[11b] *Tugas paling mencabar adalah menghasilkan sehelai demi [NP **sehelai** rambut] Aki Ross yang berjumlah 60,000 helai hingga mengambil masa 20 peratus daripada keseluruhan pembikinan filem ini.*

(Data extracted from corpus)

According to Khazriyati Salehuddin & Winskel (2009:291) the categorisation of BM classifiers depends on the shape (i.e. rigidity, dimensionality and size) or specific attributes (i.e. inanimate count nouns) of the objects. Thus, the physical characteristics of the noun referents (i.e. count or mass) determine the choice of the classifiers in BM. From the instances above, the invariant meaning of the classifier ‘*keping*’ is realised as ‘singular flat 2D inanimate noun’. This can be identified from [10a] and [10b] where this classifier co-occurs with inanimate nouns that are ‘*cek*’ which means ‘cheque’ and ‘*tanah*’ which means ‘land’. ‘Cheque’ and ‘land’ although vary in size, these two referents share some similar physical attributes which are ‘rigid’ (i.e. fairly thick and inflexible), flat and consisting the measurement of 2D dimension (which means length and width without any attention to height).

On the other hand, ‘*sehelai*’ is used to classify inanimate count referents which are described as rather light and flexible which comprises the measurement of 2D

dimension such as '[11a] *rambut*' which means 'hair' and '[11b] *kain rentang*' which means 'spread cloth'. Although the use of '*sekeping*' and '*sehelai*' can be occasionally seen as interchangeable in BM, for instance '*sehelai kertas*' and '*sekeping kertas*' (tr. a piece of paper) are acceptable, it is necessary to distinguish the rigidity of the noun referents whether or not flexible. Hence, '*kertas*' which means 'paper' which is rather thick and inflexible is always classified as '*keping*' but not '*helai*'. This is evident in [10a] where 'cheque' albeit is seen as a type of paper, it is fairly thicker than a standard piece of paper which is rather light. As such, the core value of '*sehelai*' is identified as 'singular light 2D dimension inanimate noun'.

4.1.2.2.1(b) *Sebiji, sebuah, seorang, seseorang, sebatang and seekor*

The postulation of invariant meanings for the grammatical items above is discussed in the following language samples:

[12a] *Kalau tekak berasa panas, saya makan [NP sebiji telur ayam kampung] secara mentah.*

(Data extracted from corpus)

[12b] *Selain [NP sebiji pil], dua helai daun pudina dan [NP sebiji epal itu], beliau tidak mengambil sebarang makanan lain.*

(Data extracted from corpus)

[13a] *Jurucakap polis berkata, Sharul Azmi dan Arbaayah yang menaiki [NP sebuah motosikal] terbunuh selepas terbabit dalam kemalangan dengan [NP sebuah kereta] di persimpangan lampu isyarat Jalan Langkasuka, Larkin, kira-kira jam 10 malam tadi.*

(Data extracted from corpus)

[13b] *Pastinya antara kriteria yang diberikan keutamaan ialah bagaimana bahasa Melayu yang menjadi bahasa ibunda berjaya membina [NP **sebuah** negara Malaysia] seperti hari ini.*

(Data extracted from corpus)

[13c] *Apa yang malangnya, pemimpin-pemimpin yang kononnya selama ini memperjuangkan Islam – [NP **sebuah** agama] yang cukup mencintai keamanan dan kedamaian - membiarkan sahaja penyokong mereka bertempur dengan pihak polis (yang sudah pastinya majoritinya orang Melayu dan Islam).*

(Zulkiflee Bakar, Utusan Malaysia, March 10 2009)

The two instances above (i.e. [12a] and [12b]) denote the use of ‘*sebijī*’ as to classify a small and rigid spherical shape (i.e. 3D dimension) of inanimate count referent. These features are apparent in ‘[12a] *telur*’ (tr. egg), ‘[12b] *epal*’ (tr. apple) and ‘[12b] *pil*’ (tr. pill) which are small, rigid (i.e. inflexible) and spherical. Although ‘*buah*’ literally means ‘fruit’, this word is not applicable as the classifier to fruits but ‘*biji*’ which literally means ‘seed’ is utilised to classify the fruits (Khazriyati Salehuddin & Winskel, 2009:292). This is perhaps due to the physical attributes of fruits which share the general characteristics which are spherical in shape and consist of seeds.

Alternatively, ‘*sebuah*’ is used to categorise inanimate noun referents which possess substantially bigger size (i.e. 3D dimension) than nouns which co-occur with the classifier ‘*sebijī*’ as in ‘*sebuah motosikal*’ (tr. a motorcycle) and ‘*sebuah kereta*’ (tr. a car) in [13a] which suggest the characteristics of the noun referents as big and consisting various shapes. At the same time, ‘*sebuah*’ too occurs with inanimate noun referents which have the specific attribute that is abstract. ‘*Negara*’ (tr. country) and ‘*agama*’ (tr. religion) in [13b] and [13c] are the two instances which reveal the use of

‘*sebuah*’ as a classifier for an abstract attribute of a noun. Therefore, the invariant meaning of ‘*sebihi*’ is realised as ‘singular small 3D dimension inanimate noun’ whereas ‘*sebuah*’ is conceptualised as ‘singular big 3D dimension and abstract inanimate noun’.

[14] *Di timur Ampara, sembilan wanita yang terdesak bergaduh sesama sendiri kerana mendakwa [NP seorang bayi] berusia tiga bulan yang dikenali sebagai ‘bayi ke-81’, ialah anak mereka.*

(Data extracted from corpus)

[15] *Justeru untuk menanganinya, apakah persediaan yang perlu dibuat oleh [NP seseorang guru itu], lebih-lebih lagi mereka yang bakal memulakan tugas dalam bidang kerjaya ini?*

(Data extracted from corpus)

It is apparent that these two classifiers (i.e. *seorang* and *seseorang*) only occur with animate (i.e. human) nouns. The use of these classifiers although sometimes is seen interchangeable, there is a subtle difference between them. ‘*Seorang*’ is used with an identified animate (i.e. human) noun referent as in [14] where ‘*bayi ke-81*’ (tr. 81st baby) is recognised as an ‘identified’ noun referent which is being referred to. Nevertheless, in [15], the classifier ‘*seseorang*’ functions to denote an ‘unidentified’ person which is being described (i.e. it could be any ‘*guru*’ (tr. teacher) in common without any specific or definite reference). As a result, the invariant meaning for ‘*seorang*’ is comprehended as ‘an identified singular animate (human) noun’ whereas ‘*seseorang*’ as ‘an unidentified singular animate (human) noun’.

[16a] *Ketika menyambut kemerdekaan 42 tahun yang lalu, ada pihak ragu-ragu bagaimana Malaysia akan mampu berdikari kerana kononnya [NP sebatang jarum] pun tidak mampu dihasilkan oleh rakyatnya sendiri.*

(Data extracted from corpus)

[16b] *Datuk nenek bapa penghuni asal kampung tidak ada kemudahan asas, kecuali [NP **sebatang** jalan kampung] yang ditar.*

(Data extracted from corpus)

In the language samples above, '[16a] *jarum*' (tr. needle) and '[16b] *jalan*' (tr. road) share the physical characteristics of being regarded as long and thin. The use of '*batang*' which literally means 'stem' to classify these noun referents is possibly because they share the physical identification of a stem (i.e. long and narrow / thin). Hence, the invariant meaning of this classifier is rather obvious that is 'singular long inanimate noun'.

[17a] *Saya memerhatikan [NP **seekor** semut] mengeluarkan benih disimpan untuk dimakan kemudian.*

(Data extracted from corpus)

[17b] *Saiz, badannya mungkin kecil tetapi pekebun, Malik Zainal, bersyukur kerana mampu menewaskan [NP **seekor** harimau kumbang] selepas bertarung beberapa minit dengan binatang buas itu minggu lalu, dan menerima 40 jahitan di beberapa bahagian badannya.*

(Data extracted from corpus)

In contrary to '*seorang*' and '*seseorang*' which only appear with animate (human) nouns, '*ekor*' which literally means 'tail', only occurs with animal noun referents as in '[17a] *seekor semut*' which means 'an ant' and '[17b] *seekor harimau kumbang*' which means 'a jaguar'. The use of '*ekor*' to classify the animals is perhaps due to the shared or common physical attribute of animals (inclusive of insects) that is 'having a tail'. The invariant meaning of this classifier is postulated as 'singular animate (animal) noun'.

4.1.2.2.2 Indicators of Large Entity

Although all the quantifiers which indicate the large noun entity signify the meaning of ‘MORE THAN ONE’ which means plural entity, the distinctive meaning of each of these quantifiers can be realised through the use of these grammatical categories in the written discourse such as follows:

4.1.2.2.2(a) Hundreds of, thousands of, *ratusan*, *beratus-ratus*, *ribuan*, *beribu-ribu* and *jutaan*

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[18a] The final decision will be made by military doctors before the event, expected to raise [NP **thousands of** *pounds*] in sponsorship for needy families of ex members of the airborne forces.

(Data extracted from corpus)

[18b] Was it realistic to hope that these [NP **thousands of** *troops*], with their equipment, could be pulled out in just three weeks?

(Data extracted from corpus)

[19] I was nine at the time of the wedding and you just could not imagine how foolish I felt, dressed as a bride in all her finery, standing beside a six-year-old and with [NP **hundreds of** *people*] looking on.

(Data extracted from corpus)

The noun head ‘[18a] pound-s’ and ‘[18b] troop-s’ indicate plurality (MORE THAN ONE) through the occurrence of their signal ‘-s’. The presence of ‘[19] people-Ø’ as the noun head although does not signify the occurrence of ‘-s’ to indicate ‘MORE THAN ONE’ entity, this noun serves as the plural referent. Reid (1991:56) proposes

that 'people' indicates plural entity as it means "an aggregate of human beings" which is different from 'person' which means "human being."

The contrasting Entity Number signals have become one of the problems in the Entity Number System as '-s' is not always an indicator of plurality (which means 'MORE THAN ONE') and a 'zero signal' may not necessarily convey the meaning of 'ONE'. As for the case of 'team-Ø' and 'player-Ø', the zero signal in both nouns communicate the meaning of 'ONE'. However, Reid (1991:51) finds that these two words differ in their semantic functions as the meaning of team although initially posited as "an aggregate of players", another communicative function of it suggests that "the players must be functioning cooperatively in some kind of group activity". Hence, when unity becomes the centre of purpose which is portrayed in team but absent in player, these "physically discrete referents" are perceived as "a single thing" which later posits the meaning of 'ONE' and 'MORE THAN ONE' for 'team'. In line with that, Reid (1991) suggests that the problems in contrasting Entity Number signals are able to be solved by explaining the meaning of the lexical stems by relating to the message which is being conveyed (i.e. communicative function but not referential function).

Therefore, the invariant meaning of 'hundreds of' is conceptualised as 'a quantity of plural countable noun which is more than one hundred' whereas 'thousands of' is identified as 'a quantity of plural countable noun which is more than one thousand'.

[20a] *Darus atau Cikgu Darus adalah diantara [NP ratusan guru Melayu] yang memerah keringat serta berlari ke hulu ke hilir dalam ikhtiar untuk menegakkan bahasa dan sastera Melayu berada di tahap yang gemilang.*

(Data extracted from corpus)

[20b] *Bagi menceriakan suasana, pengunjung jangan lupa membawa kacang goreng untuk diberi kepada [NP **ratusan** monyet hutan] yang jinak sambil bergambar.*

(Data extracted from corpus)

[20c] *Walaupun kehebatannya pada skala yang lebih kecil, sesiapa pun tidak boleh menyangkal bahawa jutaan manusia mati dan menjadi mangsa akibat [NP **ratusan** peperangan kecil] dan sederhana yang meletus di sana sini.*

(Data extracted from corpus)

[21a] *Kawan rasa niat murni Halimah mesti disambut baik semua lapisan masyarakat, lebih-lebih lagi ahli Pemadam di Johor sudah mencapai angka [NP **ribuan** orang].*

(Data extracted from corpus)

[21b] *Bagi mereka yang gemarkan bidang fotografi di dasar laut pasti tidak akan melepaskan peluang merakamkan [NP **ribuan** gambar menarik] di situ.*

(Data extracted from corpus)

[21c] *Hanya dari jeti kira-kira 100 meter daripada gigi air Pulau Lankayan, sama ada anda menyelam scuba, snorkeling mahu pun hanya duduk di atas jeti, anda dapat saksikan [NP **ribuan** ikan anemone], batfish, fusilier, wrasse, lion fish, ikan yu terumbu black tip*

(Data extracted from corpus)

[22a] *Kedua-dua penyanyi itu dikatakan mempunyai [NP **jutaan** pengikut setia] yang turut membenci satu sama lain kerana perbalahan itu.*

(Data extracted from corpus)

[22b] [_{NP} **Jutaan** *tahniah*] diberikan kepada Kementerian yang diharap terus membela dan menjaga nasib guru yang banyak berkorban demi negara tercinta.

(Data extracted from corpus)

For the BM quantifiers, unlike English, the noun referent which becomes the head is always ‘ONE’ despite the occurrence of the quantifiers which indicate ‘MORE THAN ONE’ entity. The plurality in BM is not revealed through the occurrence of the signal ‘-s’ to show ‘MORE THAN ONE’ entity but the noun head which undergoes complete reduplication is the signal for the occurrence of plurality (i.e. ‘MORE THAN ONE’ entity). For instance, ‘*pelajar-Ø*’ signifies ‘entity-Ø’ (i.e. ‘*pelajar-one*’ that means one student) whereas ‘*pelajar-pelajar*’ is signalled as ‘entity-entity’ (to indicate more than one student). From the instances above, it can be concluded that ‘*ratusan*’ (tr. hundreds of), ‘*ribuan*’ (tr. thousands of) and ‘*jutaan*’ (tr. millions of) are used to quantify all types (animate and inanimate) of count nouns.

This is evident in ‘[20a] *ratusan monyet* (tr. hundreds of monkeys)’ (i.e. animate: non-human), ‘[21b] *ribuan gambar* (tr. thousands of pictures)’ (i.e. inanimate) and ‘[22a] *jutaan pengikut* (tr. millions of supporters)’ (i.e. animate: human). Accordingly, the invariant meaning of the quantifiers ‘*ratusan*’, ‘*ribuan*’ and ‘*jutaan*’ is realised as ‘a quantity of animate and inanimate noun; more than one hundred’, ‘a quantity of animate and inanimate noun; more than one thousand’ and ‘a quantity of animate and inanimate noun; more than one million’ respectively. The use of ‘*beratus-ratus*’ and ‘*beribu-ribu*’ was found to be less common in any written discourse as there were no language samples obtained to highlight their use in sentences. However, the invariant meanings of ‘*beratus-ratus*’ (tr. hundreds of) and ‘*beribu-ribu*’ (tr. thousands of) are both identical to that of ‘*ratusan*’ (tr. hundreds of) and ‘*ribuan*’ (tr. thousands of) respectively.

4.1.2.2.2(b) Many, *banyak*, *para* and *ramai*

The postulation of invariant meanings for the grammatical items above is explained in the following linguistic data:

[23a] There also remains the abiding risk that this virus or a bird flu virus could mutate to a more aggressive form - but that threat is no greater now than it has been for [_{NP} many years].

(The Independent, July 26 2009)

[23b] But experts yesterday pointed out that the brothers' case remained rare and that [_{NP} many staff] would not have experience in dealing with such serious offenders.

(Brown, J., The Independent, August 9 2009)

The noun referent 'years' which is inflected with an '-s' as the indicator of 'MORE THAN ONE' entity indicates that 'many' functions to quantify plural noun referents. Likewise, although there is no '-s' which is present as the morphological identity for 'staff' to reveal its semantic property (i.e. 'MORE THAN ONE' entity), it is also indicating plurality as 'staff' is defined as "a professionally defined aggregate of human beings" which is rather similar to that of 'people' which is identified as "an aggregate of human beings" which shows 'MORE THAN ONE' entity (Reid, 1991:61). As for that reason, the invariant meaning of 'many' is postulated as 'indefinite big quantity of plural countable noun'.

[24a] *Dunia muzik juga dihidangkan dengan konsep rebellious Eminem, Papa Roach dan Limp Bizkit yang ternyata berjaya menarik [_{NP} banyak peminat] selepas kejayaan Kid Rock sebelumnya.*

(Data extracted from corpus)

[24b] *Dalam suasana [NP **banyak** tentangan] terhadap PPSMI, persoalan peningkatan jumlah calon yang menjawab dalam bahasa Inggeris kian bertambah adalah satu perkara.*

(Utusan Malaysia, December 31 2008)

[24c] *[NP **Banyak** semut] yang berhurung di meja makan itu.*

(Data extracted from corpus)

[25a] *Bagaimana kita hendak mengetahui [NP **para** pelajar] benar-benar menggunakan Bahasa Inggeris kerana mereka cuma menulis jawapan pilihan 'A hingga D'.*

(Data extracted from corpus)

[25b] *Seharusnya [NP **para** pemimpin] yang mewakili kaum masing-masing harus berasa gusar dengan perkembangan yang cukup mencemaskan ini.*

(Data extracted from corpus)

[26a] *Malah ada yang berpendapat [NP **ramai** pelajar Melayu] luar bandar bakal menjadi mangsa kepada dasar itu.*

(Mohd Yahya Mohamed Ariffin, Utusan Malaysia, November 19 2008)

[26b] *[NP **Ramai** Melayu] luar bandar mendapat manfaat dengan menguasai bahasa itu dan sudah pasti mahir bahasa Inggeris untuk menguasai matematik dan sains.*

(Lukman Ismail, Utusan Malaysia, March 9 2009)

'*Banyak*' which means 'many' or 'a lot of' is one of the quantifiers in BM which serves as an indicator of large entity. This quantifier can be seen occurring with animate

(i.e. human and non-human) as in '[24a] *banyak peminat*' (tr. many fans) and '[24c] *banyak semut*' (tr. a lot of ants). At the same time, '*banyak*' too serves as a quantifier which occurs with inanimate noun as in '[24b] *banyak tentangan*' (tr. a lot of disputes). Accordingly, the invariant meaning of '*banyak*' is realised as 'indefinite large quantity of animate (i.e. human and non-human) and inanimate noun'.

Discussing on another quantifier which is '*para*' (tr. many), the two examples above indicate the occurrence of '*para*' to indicate the quantity of the animate (human) noun referents. '*Para pelajar*' is more likely to be interpreted as 'large quantity of students in general without any attention on any specific student'. Likewise, '*ramai*' also serves as an indicator of large quantity which quantifies the animate (human) noun as in '[26a] *ramai pelajar Melayu*' (tr. many Malay students) and '[26b] *ramai Melayu*' (tr. many Malays). This quantifier too may possibly be inferred as denoting 'large quantity of students in general without any attention on any specific student' as in [26a].

The semantic properties of both '*para*' and '*ramai*' reveal that these two quantifiers are most likely to occur interchangeably in sentences. However, based on their occurrences in [25a], [25b], [26a] and [26b], it was found that these two words differ to some extent although both are referring to the noun referents in large quantity. One of the distinctive features identified is that '*para*' is more comfortably applied in sentences which reveals the quantity of the noun referents in general and more over, this quantifier is more likely to appear to address the noun referents as 'crowd' (which means generic reference).

In contrast, the occurrence of '*ramai*' as the quantifier of the noun referents suggests the emphasis on the quantity in larger scale and the use of this quantifier is seen as leaving an impact on the noun referents as a result of the event discussed as compared to '*para*' which does not signify any impact on the noun referents but highlighting them generally. From the examples above, '[25a] *para pelajar*' (tr. many

students) and '[25b] *para pemimpin*' (tr. many leaders) is inappropriate to be replaced with '*ramai pelajar*' (tr. many students) and '*ramai pemimpin*' (tr. many leaders) as these sentences do not highlight the impact that the event or situation might leave on the noun referents. Similarly, '[26a] *ramai pelajar*' (tr. many students) and '[26b] *ramai Melayu*' (tr. many Malays) are irreplaceable with '*para pelajar*' (tr. many students) and '*para Melayu*' (tr. many Malays) as both are emphasising the effect or impact of the issue which is being discussed on the noun referents and at the same time, the quantity (i.e. in a larger scale) of the noun referents who were impacted by the issue is also emphasised.

As such, the invariant meaning of '*para*' is postulated as 'indefinite large quantity of animate (human) noun; generic reference to the crowd' whereas '*ramai*' is identified as 'indefinite large quantity of animate (human) noun; emphasis on quantity in larger scale'. Unlike English, the noun referents in BM always occur in its singular form (i.e. 'ONE' entity) despite the occurrence of the quantifiers which indicate 'MORE THAN ONE' entity. Hence, '*banyak*', '*para*' and '*ramai*' cannot occur with noun referents which are reduplicated to indicate plurality.

4.1.2.2(c) A large number of, a large amount of, a great number of, a great deal of and *berguni-guni*

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[27a] But more damaging are the potential medical and social costs of [NP **a large number of people**] taking the antiviral drug when they show no symptoms of the illness.

(*The Independent*, August 10 2009)

[27b] Indeed, empirical evidence on economies of scale across [NP **a large number of** British *industries*], suggests considerable diversity in their extent.

(Data extracted from corpus)

[28] Once they have finished their paid work, women in developing countries spend [NP **a large amount of** *time*] on domestic tasks such as cooking.

(Data extracted from corpus)

[29] The homoclinic orbits to the origin that lie close to X spiral [NP **a great number of** *times*] around “C+ or C” before returning to the origin as you work away from X along the spiral the number of turns around “C+ or C” decreases.

(Data extracted from corpus)

[30] In fact where there is [NP **a great deal of** *evidence*] of use, this could be a substitute for poor employment practice which has failed to take account of matching manpower patient needs.

(Data extracted from corpus)

The language samples (i.e. [27a] and [27b]) show the occurrence of ‘a large number of’ with plural countable nouns. The presence of ‘-s’ signal seems to be important in signifying ‘MORE THAN ONE’ entity. However, the grammatical number analysis employed for ‘people-Ø’ although indicates ‘zero entity’, the semantic property of ‘people’ suggest that it is defined as ‘an aggregate of human beings’ and as for that reason, it always takes a plural verb which signifies ‘MORE THAN ONE’ entity. In another example, (i.e. [27b]), the occurrence of ‘entity-s’ to mark the plurality of the noun referent is rather noticeable (i.e. industry-s which becomes industries). From the analysis, the invariant meaning of ‘a large number of’ is realised as ‘indefinite bigger

quantity of plural countable noun (i.e. greater than many). Similarly, the presence of ‘a great number of’ in [29] which quantifies the noun referent ‘time-s’ suggests that this quantifier is used to quantify the plural countable nouns. The ‘-s’ indicator signifies ‘MORE THAN ONE’ entity which reveals the meaning of ‘times’ as ‘a period for something to occur’ which means countable. Although these two quantifiers share the similar semantic properties and could possibly be utilised interchangeably, ‘a great number of’ is realised as ‘a very large quantity of plural countable noun (which means greater than a large number of)’.

Discussing on ‘a large amount of’, its meaning is recognised as ‘indefinite bigger amount of uncountable noun’ (i.e. greater than much). This is evident in [28] where the noun referent ‘time-Ø’ which carries a ‘zero signal’ signifies the noun as a mass referent which holds the semantic property of ‘ONE’ entity as ‘time’ in this context refers to ‘a period to do or accomplish something’ which means uncountable. At the same time, ‘a great deal of’ as in [30] designates that this quantifier only co-occurs with mass referents. For instance, ‘[30] evidence-Ø’ with a ‘zero signal’ suggests the meaning of ‘evidence’ as a mass referent which refers to ‘things of different kinds that make something believable’. Based on these instances, both ‘a large amount of’ and ‘a great deal of’ are found to be similar in their meanings except for the emphasis on the quantity in ‘a great amount of’ which suggests its invariant meaning as ‘a very large amount of uncountable noun.

Moving on to ‘*berguni-guni*’ (tr. sackfuls of), similar to that of ‘*beratus-ratus*’ and ‘*beribu-ribu*’, there were no instances found from the written corpus which highlight the use of this quantifier in any written discourse. This word is realised as another type of classifier which denotes the quantity of inanimate mass referents in large quantity. ‘*Berguni-guni*’ which functions as mensural classifier occurs with numerals to serve as an indicator of count referent for the mass noun (Khazriyati

Salehuddin & Winskel, 2009; Sew, 2007). Hence, this classifier may occur with mass nouns such as ‘*beras*’ (tr. rice grains), ‘*gula*’ (tr. sugar), and ‘*garam*’ (tr. salt) as in ‘*berguni-guni beras*’ (tr. sackfuls of rice grains), ‘*berguni-guni gula*’ (tr. sackfuls of sugar) and ‘*berguni-guni garam*’ (tr. sackfuls of salt). However, the use of ‘*berguni-guni*’ seems to be obsolete in formal written discourse which alternatively suggest the instances such as ‘*ratusan guni beras*’ (tr. hundreds of sacks of rice grains), ‘*ribuan guni gula*’ (tr. thousands of sacks of sugar) and ‘*jutaan guni garam*’ (tr. millions of sacks of salt) which sounds more appropriate. Accordingly, the invariant meaning of ‘*berguni-guni*’ is realised as ‘sackfuls of inanimate mass noun (large quantity)’.

4.1.2.2.2(d) The majority of, an abundance of, plenty of, a lot of, lots of and numerous

The postulation of invariant meanings for the grammatical items above is shown below:

[31a] Little wonder that, as another recent survey showed, it is treasured by
 [NP **the majority of** Britons].

(*The Independent*, September 10 2009)

[31b] [NP **The majority of** the *writing*] is Standard English; with no swear words or slang and sounds like Received Pronunciation.

(*Data extracted from corpus*)

From the instances of its occurrence as in [31a] and [31b], the invariant meaning of ‘the majority of’ is realised as ‘almost all / most of the plural countable and uncountable noun’. The ‘-s’ in ‘Briton-s’ signifies ‘MORE THAN ONE’ entity which then marks Britons as a plural referent whereas ‘writing-Ø’ means that it is a mass referent which refers to ‘the activity of writing which involves books and articles’.

[32a] The trick is easy if there are birch trees about then there is always [NP **an abundance of** dead *twigs*] which can be snapped easily off the trunks.

(Data extracted from corpus)

[32b] To begin with, the lake would be of salt water, but as the water from the various rivers flowed into it, it would become fresh and provide [NP **an abundance of** *water*] for all the country's foreseeable requirements.

(Data extracted from corpus)

'An abundance of' is used to quantify both plural countable and uncountable noun. For example, the occurrence of 'twig' with an '-s' signifies its 'MORE THAN ONE' entity. As for [32b], the noun referent 'water-Ø' is perceived as mass referent as it does not refer to its type as 'foods', 'sugars' and 'waters' (see [9a] and [9b]). According to Wierzbicka (1985) cited in Reid (1991:69) mass nouns are "not correlated with unboundedness but rather with arbitrary divisibility." This means that things which retain their physical properties after being divided or undergoing transformation are always mass nouns. For instance, when water is divided into several parts, the "resulting parts" will also be water, unlike a table (countable noun) which may not be called a table after it is divided (if only possible) into parts. As 'abundance' is understood as 'more than enough', the invariant meaning of 'an abundance of' is determined as 'an excessive large quantity of plural countable and uncountable noun'.

[33a] That is [NP **plenty of** *time*] because the prison is only ten kilometres from here.

(Data extracted from corpus)

[33b] In terms of our city coverage for example, we always seem to talk to men with red, blue or black braces – yet there are [NP **plenty of** expert women] too.

(Data extracted from corpus)

[34a] One woman - an American, working at one of the big hotels - had written in [NP **a lot of** online forums] arguing that it was bad and getting worse, so I called her to arrange a meeting.

(Hari, J., The Independent, April 7 2009)

[34b] There is [NP **a lot of** hypocrisy] in this.

(Hamilton, A., The Independent, September 24 2009)

[35a] I do hope you enjoy reading them and have [NP **lots of** fun] trying out new ideas.

(Data extracted from corpus)

[35b] But the heat has gone out of that dispute, with everyone agreeing on a new warm, fuzzy consensus that it is a jolly good thing for [NP **lots of** young people] to go to university, but it is up to each individual student to decide if they want to.

(The Independent, August 21 2009)

From the analysis of each of the language samples above, ‘plenty of’, ‘a lot of’ and ‘lots of’ were found to be sharing the identical semantic properties which are ‘indefinite large quantity of plural countable and uncountable noun’. The occurrence of these quantifiers with the plural countable noun can be identified in ‘[33b] plenty of women’, ‘[34a] a lot of forums’ and ‘[35b] lots of people’. ‘Forum-s’ is established as a plural entity due to the presence of its signal ‘-s’ whereas ‘people’ is comprehended

from the beginning of the study as ‘an aggregate of human beings’ which means plural referent. Discussing on the grammatical number for [33b], the noun referent ‘women-Ø’ (which is identified as irregular plural by the prescriptivists) although indicates a ‘zero signal’ which signifies ‘ONE’ entity, it is a plural referent as it means ‘an aggregate of female human beings’.

In addition, the use of these quantifiers as the indicator of large quantity of the uncountable nouns are shown in ‘[33a] time-Ø’ (see [28]), ‘[34b] hypocrisy-Ø’ and ‘[35a] fun-Ø’. All these noun referents are recognised as mass referents as they do not signify any discrete physical boundaries. Subsequent to that, all these quantifiers are able to be utilised interchangeably as they share identical semantic properties.

[36] A plant of noble proportions producing [NP **numerous** stems], each consisting of a large shiny green leaf and a leafy bract from which a spike of soft blue flowers emerges.

(Data extracted from corpus)

The morphological identification of the noun referent ‘stem-s’ signals ‘-s’ as ‘MORE THAN ONE’ stem which carries the grammatical number of a plural noun. Thus, it is apparent that ‘numerous’ only occurs with the plural countable noun. The invariant meaning of ‘numerous’ is identical to ‘a great number of’ that is ‘a very large quantity of plural countable noun’. Hence, these quantifiers may occur interchangeably.

4.1.2.2.2(e) Much, more and most

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[37a] Nor does the process, as announced, inspire [NP **much** confidence].

(The Independent, September 10 2009)

[37b] “There isn't [_{NP} **much** *interest*] in these problems,” he says sadly.

(Hari, J., *The Independent*, April 7 2009)

[37c] I take photographs at this stage simply to decide on the basic composition, as this saves [_{NP} **much** *time*].

(*Data extracted from corpus*)

From the analysis of invariant meaning, ‘much’ is conceptualised as ‘indefinite big amount of uncountable noun’. The absence of ‘-s’ as the morphological identity in the noun referents (i.e. ‘confidence-Ø’, ‘interest-Ø’ and ‘time-Ø’) posits the meaning of ‘ONE’ which then conceptualises these nouns as mass referents. ‘Interest’ in this context denotes that ‘the problem which is being discussed does not have the quality of being attracted’ (uncountable) whereas ‘confidence’ is referred as ‘the feeling of belief or faith that is immeasurable’. ‘Time’ in [37c] is also a mass referent as it refers to ‘a period to do or accomplish something’ (see [28]).

[38a] In the 18th century slightly [_{NP} **more** *humane values*] evolved as children became useful earners, and in the 19th century the state in many countries stepped in to stop cruel child labour.

(Alibhai-Brown, Y., *The Independent*, June 29 2009)

[38b] This newspaper believes that the solution to almost any problem is to publish [_{NP} **more** *information*] rather than less.

(*The Independent*, August 21 2009)

[39a] It is discouraging, to put it mildly, to see this acrimonious re-run of the arguments about "Hillarycare" 15 years ago over something that, to [NP **most** *Europeans*], is beyond dispute: the right of everyone to decent healthcare they can afford.

(The Independent, August 13 2009)

[39b] It is perhaps the detailed pigment chapter which holds [NP **most** *information*] that will prove valuable to working artists.

(Data extracted from corpus)

The linguistic data presented from [38a] to [39b] result in conceptualising ‘more’ and ‘most’ as quantifiers which function to quantify both plural referents as in ‘[38a] more value-s’ and ‘[39a] most European-s’ (with the presence of ‘-s’) and mass referents as in ‘[38b] more information-Ø’ and ‘[39b] most information-Ø’. As suggested by Reid (1991:70), the circumstance where certain nouns may take a form to occur in count and non-count context is unavoidable. However, this idea seems to be inapplicable to that of ‘information’ as it never occurs with Entity-s. Perhaps the concept of ‘furniture’ (see the explanation for [9a] and [9b]) is relevant to define ‘information’ as ‘details or facts of different kinds’ that makes it uncountable as it is too dissimilar. Despite sharing similar semantic properties, ‘more’ and ‘most’ possess their own core meanings. ‘More’ is identified as ‘indefinite bigger quantity of plural countable and uncountable noun; which is greater than usual’ whereas the invariant meaning of ‘most’ is identical to that of ‘the majority of’ (see [31a] and [31b]) as it is conceptualised as ‘almost all or the entire plural countable and uncountable noun’.

4.1.2.2(f) Various and *pelbagai*

The postulation of invariant meanings for the grammatical items above is shown below:

[40] We have seen [_{NP} **various** *ways*] in which programs can behave unpredictably the normal form needs enough structure to characterise all of these.

(Data extracted from corpus)

‘Numerous’ and ‘various’ are subsumed under the category of adjectives based on the prescriptive view of grammar as the function of these words are merely seen as to qualify the noun head which follows them. However, the Entity Number System which was employed to analyse the grammatical function of these words denote that these words function to quantify the noun referent as the presence of the ‘entity-s’ influences their occurrence in the noun phrase. For instance, in [40], the occurrence of ‘-s’ signal signifies the plurality of the noun referent, ‘way’. Although ‘numerous’ and ‘various’ share some similar semantic properties (i.e. indicating large quantity of plural countable noun), these quantifiers too have some distinctive features as ‘various’ consists of an additional attribute of describing the quantity of the types of the noun referent. Therefore, the invariant meaning of ‘various’ is identified as ‘indefinite large quantity of different types of plural countable noun’.

[41a] *Program stesen KBS Chit chat with beautiful ladies mengundang wanita asing dari seluruh pelosok dunia membicarakan [_{NP} **pelbagai** topik] sepenuhnya dalam bahasa Korea.*

(Marhaini Kamaruddiun, Utusan Malaysia, June 26 2009)

[41b] *Barangkali lebih baik mereka bersepakat untuk memajukan semula kawasan itu dengan [NP **pelbagai** jenis tanaman] yang memberikan pulangan lumayan dan ini boleh dilaksanakan dengan bantuan [NP **pelbagai** agensi kerajaan] yang mempunyai kepakaran dan pengalaman.*

(Data extracted from corpus)

‘*Pelbagai*’ in BM is equivalent to ‘various’ in English. From the language samples, the presence of ‘*pelbagai*’ is seen prominent to quantify all types of nouns (i.e. animate and inanimate nouns). For instance, ‘[41a] *topik*’ (tr. topic) refers to inanimate noun whereas ‘[41b] *tanaman*’ (tr. crops) is an animate noun. The occurrence of ‘*pelbagai*’ as a quantifier for animate nouns is more evident with the co-occurrence of ‘*jenis*’ which entails the meaning of ‘type’ as in [41b], ‘*pelbagai jenis tanaman*’ (tr. various types of crops). As such, the invariant meaning of ‘*pelbagai*’ is realised as ‘indefinite large quantity of different types of animate and inanimate noun’.

4.1.2.2.3 Indicators of Small Entity

The quantifiers which fall into the category of the indicators of small entity function to quantify the mass referents (which is signified as ‘ONE’) and plural referents (which is signified as ‘MORE THAN ONE’) which appear in minor scale. The semantic properties of the noun referents were identified through the Entity Number System which then results in conceptualising the invariant meaning of these quantifiers.

4.1.2.2.3(a) A little, a bit of, less, least and *sedikit*

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[42] As before, [_{NP} **a little** *water*] was used to thin the acrylic to the consistency of cream and most of it was gone over twice to get an even coverage of bright intense colour.

(Data extracted from corpus)

[43] Then I picked up [_{NP} **a bit of** *naan bread*] and mopped up my curry sauce.

(Data extracted from corpus)

The occurrence of ‘a little’ and ‘a bit of’ in the linguistic data above (i.e. [42] and [44]) shows that these quantifiers share the identical semantic properties as both are used to quantify a mass referent as in ‘[42] a little water-Ø’ and ‘[43] a bit of naan bread-Ø’. The ‘zero signal’ which is attached to ‘water’ (i.e. liquid; unbounded entity) and ‘bread’ (i.e. a type of food which consists of several non-identical individual entities) connotes the meaning of ‘ONE’ entity which means a mass referent. As such, the grammatical number analysis suggests that ‘a little’ and ‘a bit of’ only appears to quantify a mass referent and they indicate indefinite small amount of the noun referent. These quantifiers can be used interchangeably and hence, their invariant meaning is realised as ‘indefinite small amount of uncountable noun’.

[44] Above all, we need to increase the amounts of public sector cash which is made available, across the world, for using GM to discover how to grow those staple food crops on which the world's poorest people depend - and with [_{NP} **less** *water*], greater pest-resistance, [_{NP} **less** *fertiliser*], greater salt tolerance and on land which has hitherto proven too marginal for productive cultivation.

(The Independent, August 11 2009)

[45] She should begin by allocating days off, allowing the maximum numbers to be away on the days of [_{NP} **least** workload].

(Data extracted from corpus)

‘Less’ and ‘least’ are the comparative and superlative form of ‘a little’ which designate the degree of the amount of the noun referent (i.e. smaller than usual). The identification of a ‘zero signal’ (i.e. Ø) in ‘[44] less water-Ø’ (does not indicate any cognitively salient shape) and ‘[45] least workload-Ø’ (immeasurable entity) shows that these entities are signifying the meaning of ‘ONE’ (i.e. mass referents). Hence, the invariant meaning of ‘less’ and ‘least’ is postulated as ‘indefinite smaller amount of uncountable noun; lesser than usual’ and ‘almost none of the uncountable noun’ respectively.

[46a] *Orang ramai perlu diberi [_{NP} **sedikit** ruang] untuk pergi ke mahkamah.*

(Data extracted from corpus)

[46b] *Kata-katanya walaupun begitu beremosi, masih ada [_{NP} **sedikit** kebenaran] dalam pandangannya itu.*

(Data extracted from corpus)

‘*Sedikit*’ in BM is equivalent to ‘a little’ and ‘a bit of’ in English. The language samples in [46a] and [46b] highlight the presence of this quantifier only with inanimate nouns as in ‘*sedikit ruang*’ (tr. a little space) and ‘*sedikit kebenaran*’ (tr. a grain of truth). There were no instances found which illustrate the use of ‘*sedikit*’ to quantify animate noun referent. Therefore, the invariant meaning of ‘*sedikit*’ is realised as ‘indefinite small amount of inanimate noun’.

4.1.2.2.3(b) Some and *sesetengah*

The postulation of invariant meanings for the grammatical items above is discussed such as follows:

[47a] Last year, [NP some workers] went on strike after they were not given their wages for four months.

(Hari, J., *The Independent*, April 7 2009)

[47b] There is [NP some welcome news] in this year's GCSE results.

(*The Independent*, August 28 2009)

[47c] For [NP some reason] Ipswich have struggled against clubs at the foot of the league this season.

(*Data extracted from corpus*)

The language sample in '[47a] some worker-s' indicates the occurrence of 'some' with plural referent (i.e. '-s' signifies 'MORE THAN ONE' entity). Besides, 'some' also functions to quantify a singular noun referent as in '[47c] some reason-Ø'. The 'zero signal' in 'reason-Ø' conveys the meaning of 'ONE' (i.e. an unidentified reason or a reason which is not known).

In spite of this, the meaning of 'ONE' for the noun referent which is morphologically identified with a 'zero signal' (i.e. Ø) and 'MORE THAN ONE' for the noun referent which is inflected with an '-s' through the Entity Number System seems to be inapplicable for the case of 'some news' in [47b]. Reid (1991:80) opined that words like 'politics', 'economics', 'acoustics', 'dynamics', 'athletics', 'smarts' and 'blues' have spanned the semantic opposition between the meanings of 'ONE' and 'MORE THAN ONE'. The occurrence of the '-s' signal in all these noun entities is not identified as an indicator of 'MORE THAN ONE' entity as Reid (1991) asserts that

these words without the '-s', are taken and employed as adjectives as in 'politic', 'economic', 'acoustic', 'dynamic', 'smart' and 'blue'. As such, these words which are generally encountered with '-s' do not designate the '-s' as a signal to signify 'MORE THAN ONE' entity but to illustrate the words as noun entities.

The grammatical number analysis employed to these words, therefore supposedly indicate the presence of a 'zero signal' (i.e. \emptyset) with these noun referents as in 'politics- \emptyset ', 'economics- \emptyset ', 'acoustics- \emptyset ', 'smarts- \emptyset ', 'dynamics- \emptyset ', and 'blues- \emptyset '. However, this morphological identification was not noticeably stated by Reid (1991) which results in the failure of the interpretation of their semantic properties as either 'ONE' or 'MORE THAN ONE'. The interpretation of the noun number for the word 'acoustic' as 'ONE' or 'MORE THAN ONE' provided by Reid (1991:81) seems to be not very effective in resolving the perceptual problem of words of its kind, as words like 'politics', 'economics', 'dynamics' and 'blues' occur both as 'ONE' and 'MORE THAN ONE' entity whereas 'athletics' and 'smarts' only occur as 'ONE'. Moreover, in the case of 'sheep- \emptyset ' and 'deer- \emptyset ', these noun entities although highlight the occurrence of a 'zero signal' which means 'ONE', they are also used in the speech community as singular referent which carries the meaning of 'ONE' and plural referent which signifies the meaning of 'MORE THAN ONE'. This means that the identification of the meaning of the lexical items solely does not influence the explanation of the Entity Number but how these words are utilised in context is equally important to facilitate the choice of Entity Number.

The interpretation of verb number (i.e. The Focus Number System) is also beneficial to explain the 'spanned semantic opposition' (see section 2.10, page 59). Verbs which are morphologically identified as 'occurrence-s' indicate the meaning of 'ONE' by focusing on 'ONE Entity' whereas the focus on 'MORE THAN ONE' entity

is revealed through the presence of ‘occurrence- \emptyset ’; such as, in the examples illustrated below:

1. This afternoon our *panel are* three male singers.

(interpretation: *are*- \emptyset = Focus on ‘MORE THAN ONE’ entity; *panel*- \emptyset = plural entity)

(Downes, E., cited in Reid, 1991:193)

2. The Parsons *family were* great letter writers, and the samples of arch’s wheedling, money-grubbing epistles included here are comic masterpieces, marvels of double talk and self-deception.

(interpretation: *were*- \emptyset = Focus on ‘MORE THAN ONE’ entity; *family*- \emptyset = plural entity)

(Haskell, M., cited in Reid, 1991:193)

In line with that, the occurrence of ‘s’ in ‘[47b] news’ does not reveal a plural referent but it suggests the occurrence of a noun entity as ‘new’ without an ‘s’ functions as an adjective. The analysis of grammatical number for ‘news’ is similar to the case of ‘furniture’ (refer to [9a] and [9b]) as the semantic properties of ‘news’ which are perceived as ‘the combination of different kinds of new information, recent reports or events which are too dissimilar’ indicate that this noun referent does not allow any enumeration but posits the meaning of ‘ONE’ (i.e. mass referent).

Another group of words which has spanned the semantic opposition between the meanings of ‘ONE’ and ‘MORE THAN ONE’ is *pluralia tantum* words (words that always appear in pairs). Allan (1980:559) cited in Reid (1991:74) identifies words like ‘scissors’, ‘tongs’, ‘tweezers’, ‘nutcrackers’, ‘pliers’, ‘tights’ and ‘spectacles’ as referents which are perceived as “two moveable leg-like members pinioned to a bridge

at one end, so as to cross each other.” These words are suggested as plural referents as they consist of two nearly identical parts that reciprocate and as unitary instrument, the absence of one of its attached parts may result in the malfunction of another nearly identical part.

Reid (1991) did not suggest the morphological identity for these *pluralia tantum* words based on the Entity Number System. Hence, the grammatical number analysis employed to these words is hypothesised as ‘scissors-Ø’, ‘tongs-Ø’, ‘tweezers-Ø’, ‘nutcrackers-Ø’, ‘pliers-Ø’, ‘tights-Ø’ and ‘spectacles-Ø’ which signifies the meaning of ‘ONE’ but not as ‘scissor-s’, ‘tong-s’, ‘tweezer-s’, ‘nutcracker-s’, ‘plier-s’, ‘tight-s’ and ‘spectacle-s’, although the occurrence of ‘-s’ is most likely to be perceived as ‘MORE THAN ONE’ which corresponds to their semantic properties as plural referents. This is due to the fact that the ‘-s’ does not function as an inflection but it serves to denote the original identity of the words as the occurrence of these words without an ‘-s’ results in the words losing their initial identity which means they deny their point of departure as ‘scissor’, ‘trouser’, ‘tight’ and ‘spectacle’ by themselves communicate different meanings that are not related to ‘scissors’, ‘trousers’, ‘tights’ and ‘spectacles’. As suggested by Reid (1991), items which are too similar and too dissimilar are uncountable and therefore, enumeration only takes place when the noun referents are sufficiently alike. Subsequent to that, as these objects (i.e. *pluralia tantum* words) comprise two nearly identical parts, these noun referents are perceived as plural entities.

Moving on to the identification of the invariant meaning of ‘some’, as it does not involve all the members of the group (i.e. noun referent), its invariant meaning is postulated as ‘certain members of the group of countable and uncountable noun’.

[48a] *Satu lagi akibat sampingan yang saya anggap mendukacitakan ialah semakin meluasnya budaya "bermuka-muka" atau "berpura-pura" dalam kalangan [NP **sesetengah** pegawai tinggi kerajaan].*

(Dr. Firdaus Abdullah, *Utusan Malaysia*, February 26 2009)

[48b] *Kesatuan Eropah dijangka menyeragamkan coklat sejajar dengan amalan [NP **sesetengah** negara] yang menerima kemasukan lima peratus CBE.*

(Data extracted from corpus)

[48c] *Asid formik ialah asid tanpa warna yang dahulunya diperolehi daripada [NP **sesetengah** serangga].*

(Data extracted from corpus)

‘*Sesetengah*’ in BM serves as the counterpart of ‘some’ in English. The linguistic data from [48a] to [48c] reveal the use of this quantifier to pre-modify the animate (human) noun (i.e. [48a] ‘*sesetengah pegawai kerajaan*’ [tr. some government officers]), inanimate noun (i.e. [48b] ‘*sesetengah negara*’ [tr. some countries]) and animate (non-human) noun (i.e. [48c] ‘*sesetengah serangga*’ [tr. some insects]). Based on the instances above, the meaning of ‘*sesetengah*’ is inferred as signifying only certain members of the group of the noun referent and hence, it is not inclusive of all the members in the group. Thus, the invariant meaning of ‘*sesetengah*’ is postulated as ‘certain members of the group of animate and inanimate noun’.

4.1.2.2.3(c) Several, a few, fewer, fewest, a couple of, a number of and *beberapa*

The postulation of invariant meanings for the grammatical items above is discussed in the following instances:

[49] Sometimes it gets quite aggressive, particularly when its own offspring are concerned, as [_{NP} **several** *walkers*] have found to their cost in recent months.

(The Independent, August 25 2009)

[50] Until [_{NP} **a few** *years*] ago they were shuttled back and forth on cattle trucks, but the expats complained this was unsightly, so now they are shunted on small metal buses that function like greenhouses in the desert heat.

(Hari, J., The Independent, April 7 2009)

The grammatical number analysis for the noun referent ‘[49] walker-s’ and ‘[50] year-s’ indicates the occurrence of the ‘-s’ as a signal which marks the nouns as plural referents. This morphological identity illustrates that ‘several’ and ‘a few’ only present to quantify plural referents. The use of these quantifiers in both sentences (i.e. [49] and [50]) suggests that ‘several’ is possibly used to replace ‘a few’ and vice versa as both are used to indicate indefinite small number of the noun referent. This results in the postulation of their identical invariant meaning as ‘indefinite small number of plural countable noun’.

[51] The fact that there are [_{NP} **fewer** young *workers*] could mean that people have to retire later in the future.

(Data extracted from corpus)

[52] Those who secure the [_{NP} **fewest** *votes*] in each successive count are eliminated, and votes originally given to them are transferred as in full-scale STV election.

(Data extracted from corpus)

'Fewer' and 'fewest', the comparative and superlative form of 'a few' respectively are used to quantify plural referents as in '[51] fewer young worker-s' and '[52] fewest vote-s'. Although these quantifiers possess some similar semantic properties as 'less' and 'least' which signify the degree of the amount of the noun referent which is 'small', the Entity Number System analysis discloses that 'fewer' and 'fewest' only occur with plural referents. Based on the two instances above (i.e. [51] and [52]), the invariant meaning of 'fewer' is realised as 'indefinite smaller number of plural countable noun (lesser than usual)' whereas 'fewest' is conceptualised as 'almost none of the plural countable noun'.

[53] It has [_{NP} **a couple of** fully formed *battalions*], the rest organised in individual companies, two of which are devoted to maintaining public order.

(Data extracted from corpus)

[54] Accordingly, [_{NP} **a number of** migration *theories*] and general statements have been formulated over the years.

(Data extracted from corpus)

The analysis of invariant meaning based on the Entity Number System concludes that 'a couple of' and 'a number of' share the identical semantic properties to that of 'several' and 'a few' (refer to [49] and [50]). The '-s' inflection which signifies 'MORE THAN ONE' entity suggests that these quantifiers too function to quantify the plural referents as in the linguistic data '[53] a couple of battalion-s' and '[54] a number of theory-s (i.e. theories)'. The invariant meaning for 'a couple of' and 'a number of' is conceptualised as 'indefinite small number of plural countable noun' as all these quantifiers (i.e. 'several', 'a few', 'a couple of' and 'a number of') are able to be used alternatively in any of the sentences above.

[55a] *Barangkali aspek ini yang dibimbangi oleh [_{NP} **beberapa** ahli akademik] berhubung dengan Pengajaran dan Pembelajaran Sains dan Matematik dalam Bahasa Inggeris (PPSMI).*

(Mohd Hasrul Shuhari, *Utusan Malaysia*, December 29 2008)

[55b] [_{NP} **Beberapa** institusi pendidikan] bukan di bawah Kementerian Pelajaran seperti Maktab Rendah Sains Mara (MRSM), sekolah berasrama di bawah kerajaan negeri dan Kolej Yayasan Saad turut menyediakan tempat kepada lulusan UPSR yang bercita-cita belajar di SBP.

(Mohd Yahya Mohamed Ariffin, *Utusan Malaysia*, November 19 2008)

[55c] *Dia mengangkat [_{NP} **beberapa** helai daun sirih] yang tersusun rapi.*

(Data extracted from corpus)

‘*Sedikit*’ (tr. a little) and ‘*beberapa*’ (tr. several / a few) in BM are both utilised to indicate indefinite small number of the noun referent. However, the use of ‘*sedikit*’ is only apparent with the presence of inanimate noun and subsequent to that, this indicator of small entity does not by any chance quantify the animate noun referent. On the contrary, ‘*beberapa*’ seems to appear to quantify all types of noun referents (i.e. animate and inanimate noun). ‘[55a] *Beberapa ahli akademik*’ (tr. several academics), ‘[55c] *beberapa helai daun sirih*’ (tr. a few betel leaves), and ‘[55b] *beberapa institusi pendidikan*’ (tr. several educational institutions) illustrate the occurrence of ‘*beberapa*’ to quantify animate (human), animate (non-human) and inanimate noun respectively.

This quantifier is most commonly used to quantify a count noun referent as it represents the noun referent as separate entities. Nevertheless, it is also applicable to quantify the mass referents but with the presence of a classifier such as ‘*beberapa cubit garam*’ (tr. several pinches of salt) and ‘*beberapa gelas air*’ (tr. several glasses of

water). Therefore, the invariant meaning of *'beberapa'* is realised as 'indefinite small number of animate and inanimate noun'.

4.1.2.2.4 Cardinal Numbers

Cardinal numbers which are also recognised as numerals also function to quantify the noun head which co-occurs. The Entity Number System analysis posited to the noun referents reveals the functions of these quantifiers such as the following instances:

4.1.2.2.4(a) One and two

The postulation of invariant meanings for the numerals above is discussed such as in the following language samples:

[56] [_{NP} **One** woman] - an American, working at one of the big hotels- had written in a lot of online forums arguing that it was bad and getting worse, so I called her to arrange a meeting.

(Hari, J., *The Independent*, April 7 2009)

[57] But he was going to have to work for more than [_{NP} **two** years] just to pay for the cost of getting here - and all to earn less than he did in Bangladesh.

(Hari, J., *The Independent*, April 7 2009)

The grammatical number analysis to determine the invariant meaning of cardinal numbers is rather apparent. The 'zero signal' (i.e. Ø) in '[56] woman-Ø' carries the meaning of 'ONE' entity which is inferred as either 'singular countable noun' or 'a mass referent. However, as 'woman' is defined as 'a female human being', it serves as a countable referent. Hence, the 'zero signal' suggests that the quantifier 'one' is conceptualised as 'a singular item of countable noun'. Likewise, the '-s' signal in '[58] year-s' suggests that 'two' quantifies 'MORE THAN ONE' entity. Accordingly, the

invariant meaning of ‘two’ is postulated as ‘definite quantity of plural countable noun; more than one but less than three’.

4.1.2.2.4(b) *Satu, dua, dua puluh, tiga ratus, sepuluh ribu and sejuta*

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[58a] *Bagi kami ini merupakan [NP satu masalah besar] kerana setelah enam tahun Pengajaran dan Pembelajaran Sains dan Matematik dalam Bahasa Inggeris (PPSMI) dilaksanakan, peratusan penerimaan pelajar tidak pun sampai 70 peratus.*

(Muhd Ikram Fikri Abdullah, *Utusan Malaysia*, November 18 2008)

[58b] *Hal ini tidak sukar dilakukan kerana urusetia memilih hanya [NP satu panel penilai] untuk menghakimi 14 pasukan negeri yang bertanding itu.*

(Data extracted from corpus)

[59a] *Projek yang dipelopori oleh [NP dua pensyarah UKSBB itu], dijangka mampu menyumbang terhadap usaha pencegahan masalah banjir kilat di seluruh Malaysia.*

(Data extracted from corpus)

[59b] *Bagi saya ini adalah [NP dua cadangan] yang perlu dipertimbangkan sebijak mungkin kerana PPSMI adalah suatu saranan yang bernatijahkan kebaikan namun ditentang sebilangan rakyat Malaysia.*

(Feriz Omar, *Utusan Malaysia*, March 17 2009)

[60a] *[NP Dua puluh pelajar] tingkatan satu hingga lima ahli Persatuan Seni dan Budaya (Persebudaya) Sekolah Menengah Kebangsaan Temenggong Kati Kuala Kangsar akan menjayakan persembahan teater berkenaan.*

(Data extracted from corpus)

[60b] *Seorang suami yang jujur, [NP **dua puluh** tahun] berpisah dengan Rabiatul Saadah, dia tidak pernah berusaha mencari ganti.*

(Data extracted from corpus)

[60c] *Seminggu kemudian kuda petani yang hilang pulang diikuti oleh [NP **dua puluh** ekor kuda liar].*

(Data extracted from corpus)

[61a] *Tetapi mereka ini akan berfikir banyak kali untuk membeli sebuah novel Melayu yang tebalnya sekitar dua hingga [NP **tiga ratus** halaman], meskipun harganya sama mahal dengan sekeping tiket memasuki stadium untuk menonton bola sepak.*

(Data extracted from corpus)

[61b] *Perompak dan lanun itu dapat dihapuskan oleh Nikosa bersama [NP **tiga ratus** askarnya], kemudian bergelar Panglima Nikosa.*

(Data extracted from corpus)

[62a] *“Saya jangka Malaysia memerlukan sekurang-kurangnya [NP **sejuta** ayam] sehari, bukannya 800,000 berikutan peningkatan permintaan terhadap ayam oleh masyarakat Cina.”*

(Data extracted from corpus)

[62b] *Permohonan untuk mendapatkan kad itu kini dibuka kepada kira-kira [NP **sejuta** pelanggan] Celcom sedia ada.*

(Data extracted from corpus)

[62c] *Ketua Hakim Negara, Tun Mohd Eusoff Chin berkata lebih [NP sejuta kes jenayah] dan sivil dapat diselesaikan tahun lalu, walaupun mahkamah menghadapi kekurangan kakitangan dan bilik perbicaraan.*

(Data extracted from corpus)

Discussing on the cardinals or numerals in BM, the Entity Number System seems to be not prominent in highlighting the noun number as all noun referents in BM posit the meaning of ‘ONE’ despite the occurrence of the quantifiers which indicate ‘MORE THAN ONE’ entity. From the language samples presented from [58a] to [62c], it can be concluded that the cardinal numbers or numerals in BM functions to quantify all types of nouns (i.e. animate [human and non-human] and inanimate noun). This is evident in the examples such as ‘[58a] *satu masalah*’ (tr. a / one problem) (i.e. inanimate), ‘[61b] *tiga ratus askar*’ (tr. three hundred soldiers) (i.e. animate: human) and ‘[62a] *sejuta ayam*’ (tr. a million chickens) (i.e. animate: non-human). These numerals only quantify the count nouns and in order to quantify mass nouns, these numerals occur with classifiers (see section 4.1.2.2.1, page 90).

As such, the invariant meaning of ‘*satu*’ (tr. one), ‘*dua*’ (tr. two), ‘*dua puluh*’ (tr. twenty), ‘*tiga ratus*’ (tr. three hundred), ‘*sepuluh ribu*’ (tr. ten thousand) and ‘*sejuta*’ (tr. one million) is realised as ‘a single item of animate and inanimate noun’, ‘definite quantity of animate and inanimate noun; more than one but less than three’, ‘definite quantity of animate and inanimate noun; twice a ten’, ‘definite quantity of animate and inanimate noun; thrice a hundred’, ‘definite quantity of animate and inanimate noun; ten times a thousand’ and ‘definite quantity of animate and inanimate noun; thousand times a thousand’ respectively.

4.1.2.2.5 Indicators of Fractions

Diver (1975) cited in Reid (1991:83) posits the meaning of ‘other than one’ for the fractions as these quantifiers neither signify the meaning of ‘ONE’ nor ‘MORE THAN ONE’ as they are ‘less than one’ entity. However, this grammatical number (i.e. ‘OTHER THAN ONE’) is found to be problematical and therefore, disputed as Reid (1991:83) finds that this noun number would destabilise the use of ‘ONE’ to communicate the meaning of things which are perceived as mass referents as it would lead to an argument that the meaning of ‘other than one’ is more suitable for mass referents than ‘ONE’.

Reid (1991:83) agrees that for fractions, neither ‘ONE’ nor ‘MORE THAN ONE’ is appropriate as it indicates the value of ‘less than one’. Hence, in order to untangle this perplexity, it is suggested that “speakers may make their number choice on the basis of the numerator alone as in one third and two thirds.” Nonetheless, this justification seems to be helpless in resolving the number meanings of fractions as the meaning of the numerator either ‘ONE’ or ‘MORE THAN ONE’ affects the grammatical number of the denominator alone as in ‘one third’ and ‘two thirds’ but unable to reveal its communicative function which is still believed to be ‘less than one’.

4.1.2.2.5(a) Two-thirds and *dua pertiga*

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[63a] As table 7.3 shows, almost three-quarters of the 51 CASE students were classified as in employment, compared to [_{NP} **two-thirds** of the *non-CASE students*] in the constituent assembly.

(Data extracted from corpus)

[63b] The ruling United National Party does not have [_{NP} the **two-thirds majority**] in parliament required to change the constitution.

(Data extracted from corpus)

[64a] *Bercakap pada Majlis Dialog Pimpinan Kerajaan Negeri Dengan Anak Kelantan di Perantauan Sempena Aidilfitri di Kota Bharu baru-baru ini beliau berkata, kerjasama itu perlu bagi memastikan Pas memperoleh majoriti [_{NP} **dua pertiga** kerusi Parlimen] yang akan dipertandingkan.*

(Data extracted from corpus)

[64b] [_{NP} **Dua pertiga** wanita] di negara Asia Selatan tidak berpelajaran.

(Data extracted from corpus)

The Entity Number System which was employed to identify the grammatical number of the noun referents which co-occur with ‘two-thirds’ suggests that this fraction quantifies both count and mass referent in English as in ‘[63a] two-thirds of the student-s’ (i.e. plural referent) and ‘[63b] ‘two-thirds majority-Ø’ (i.e. singular referent [i.e. a single thing] as ‘majority’ refers to ‘an aggregate of people who cooperatively deal with some kind of group activity’) (see [19] for explanation on ‘team’ and ‘players’). Its counterpart in BM (i.e. *dua pertiga*), co-occurs with both animate and inanimate noun as in ‘[64a] *dua pertiga kerusi*’ (tr. two-thirds of the seats) (i.e. inanimate) and ‘[64b] *dua pertiga wanita*’ (tr. two-thirds of the women) (i.e. a group of animate: human). Therefore, the invariant meaning of ‘two-thirds’ is conceptualised as ‘definite two-thirds portion of the countable and uncountable noun’ whereas ‘*dua pertiga*’ is defined as ‘definite two-thirds portion of the inanimate and a group of animate noun’.

4.1.2.2.5(b) **Half, setengah and separuh**

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[65a] About [_{NP} **half** a *dozen*] Gilbertine novices lived there, studying theology and philosophy, and the school was possibly attended by other town students.

(Data extracted from corpus)

[65b] “[_{NP} **Half** the *fun*] of gardening is changing things around”, said Jenny.

(Data extracted from corpus)

[65c] About [_{NP} **half** the *deputies*] who defied Gen Aoun’s attempts to block the presidential election are Christians like Mr. Muawad.

(Data extracted from corpus)

From the instances above, ‘half’ is identified as indicating the ‘definite equal portion of the countable and uncountable noun’. ‘Two-thirds’ and ‘half’ are categorised as pre-determiners as these fractions are more likely to occur before the central determiners (i.e. ‘a’ and ‘the’). The presence of the article ‘a’ before the noun head ‘dozen-Ø’ as in [65a] denotes the meaning of ‘ONE’ entity as a singular referent whereas the occurrence of ‘-s’ in ‘[65c] half the deputy-s (i.e. deputies)’ indicate the plural referent. As for [65b], ‘fun-Ø’ is referred as a mass referent as it means ‘the feeling of enjoyment that someone has which is uncountable’.

[66a] *Beliau juga ialah saksi sejarah Mesir sejak [_{NP} **setengah** dekad] lalu.*

(Data extracted from corpus)

[66b] *Dalam masyarakat, memang terdapat [NP **setengah** orang] yang begitu berat menghulurkan walau sedikit wang atau hartanya kepada mereka yang memerlukan.*

(Data extracted from corpus)

[67a] *“Percayalah, hampir separuh daripada kami kesal dan untuk makluman semua, [NP **separuh** penduduk Ohio] kesal dan jangan benci kami.”*

(Data extracted from corpus)

[67b] *Lebih menyedihkan ialah lebih daripada [NP **separuh** kesalahan] berkenaan dilakukan remaja Melayu.*

(Data extracted from corpus)

‘*Setengah*’ and ‘*separuh*’ in BM are equivalent to ‘half’ in English. Both these fractions have identical invariant meaning that is ‘definite equal portion of the inanimate and a group of animate noun’. This is evident in the examples provided in ‘[66a] *setengah dekad*’ (tr. half a decade) (i.e. inanimate), ‘[66b] *setengah orang*’ (tr. half the people) (i.e. a group of animate: human), ‘[67a] *separuh penduduk*’ (tr. half the residents) (i.e. a group of animate: human) and ‘[67b] *separuh kesalahan*’ (tr. half the offence) (i.e. inanimate). These quantifiers share the same semantic properties as they can be used interchangeably in all the sentences above (i.e. [66a] to [67b]).

4.1.2.2.6 Indicators of Individual Entity

The indicators of individual entity (i.e. each, every, *tiap-tiap* [tr. each / every], *setiap* [tr. each / every] and *masing-masing* [tr. individual / respective]) in English and BM denote the noun head which co-occurs as count referents which are identified as physically discrete entities such as in the following examples:

[68] They have constructed artificial islands in the shape of all planet Earth's land masses, and they plan to sell [_{NP} **each** *continent*] off to be built on.

(Hari, J., *The Independent*, April 7 2009)

[69] Too little cash has been forthcoming from governments for the development of crops like Golden Rice, which would add Vitamin A to rice to counter the deficiency which causes blindness in around half a million children [_{NP} **every** *year*].

(*The Independent*, August 11 2009)

The morphological identity (i.e. \emptyset) in '[68] continent- \emptyset ' and '[69] year- \emptyset ' posits the meaning of 'ONE' entity to each of the noun referents. Although '- \emptyset ' serves as 'ONE' entity which also refers to the mass referents, 'continent' which is defined as 'one of the large land masses of the earth', is referred as a count referent (i.e. singular which means 'ONE'). Furthermore, 'year' which is identified as 'a period of 12 months that is measured from any particular time' too functions as a count referent which signifies singular entity (i.e. 'ONE'). Despite sharing the similar semantic properties (i.e. reference to the singular countable noun), the invariant meanings of these quantifiers are distinguishable. As in [68], 'each continent' posits the meaning of addressing all the continents (as there are seven in the world) individually which then lead to a conceptualisation that 'each' serves as 'a specific reference from a group of singular countable noun'. On the other hand, 'every' is realised as 'a generic reference of individual singular countable noun'. This is conceptualised through the example presented in '[69] every year' which suggests no specific reference to the noun referent from any group and moreover, the event or incident which is being discussed is seen as a generally recurring event.

[70a] *Menurutnya, aturcara program dirancang supaya [_{NP} setiap peserta] dapat berinteraksi dan berkenalan di antara satu sama lain dan sehubungan itu, ia bermula dengan salam perkenalan menerusi beberapa permainan mengenal diri.*

(Data extracted from corpus)

[70b] *Purata [_{NP} setiap tahun] lebih sejuta pelancong mengunjungi Kuala Perlis untuk ke Langkawi menerusi Terminal Feri Penumpang berharga RM28 juta.*

(Data extracted from corpus)

The language sample in [70a] (i.e. ‘*setiap peserta*’ which means each participant) suggests that the invariant meaning of ‘*setiap*’ which serves as the equivalent of ‘every’ is realised as ‘a specific reference from a group of singular animate noun’. In addition, the occurrence of ‘*setiap tahun*’ (tr. every year) in [70b] allows another meaning to be posited to this quantifier (i.e. ‘a generic reference of singular inanimate noun’) to highlight a recurring event. Based on the context of reference, ‘*setiap*’ has two functions which are; ‘a specific reference from a group of singular animate and inanimate noun’ and ‘a generic reference of singular animate and inanimate noun’. Although there were no linguistic data encountered which highlight the use of ‘*tiap-tiap*’, this quantifier seems to have an identical function with ‘*setiap*’ as both quantifiers are able to be utilised in any of the instances above.

[71a] *Para pelajar tidak akan mempunyai penguasaan bahasa yang baik dalam Bahasa Inggeris malah merosakkan [_{NP} bahasa ibunda masing-masing].*

(Muhd Ikram Fikri Abdullah, Utusan Malaysia, November 18 2008)

[71b] *Oleh itu adalah menjadi tanggungjawab ahli politik, pakar akademik, pertubuhan bukan kerajaan, tokoh pendidik yang hadir pada persidangan hari ini mengemukakan [_{NP} hujah **masing-masing**] dengan berani dan tanpa berselindung.*

(Utusan Malaysia, December 16 2008)

Nik Safiah Karim et al. (2008) suggest that quantifiers in BM function as pre-determiners (tr. *kata penentu hadapan*) and therefore, a quantifier always precedes a noun unlike post-determiners (tr. *kata penentu belakang*), which are only limited to the demonstrative determiners ‘*itu*’ (tr. that / those) and ‘*ini*’ (tr. this / these). Nik Safiah Karim et al. (2008:288) explicate the use of ‘*masing-masing*’ (tr. individual / respective) as a quantifier such as the following example, as it pre-modifies the noun referent, ‘*pelajar*’ (tr. student).

*“[_{NP} **Masing-masing** pelajar] membawa makanannya sendiri.”*

(An individual student must bring his / her own food).

As for that reason, based on the language samples (i.e. [71a] and [71b]), the presence of ‘*masing-masing*’ as a post-modifier indicates that this word does not reveal any function of being utilised as a quantifier. The linguistic data above which represent the total use of ‘*masing-masing*’ in authentic written discourse suggest that this word is less frequently used (perhaps none) as a quantifier.

4.1.2.2.7 Indicators of the Whole Entity

‘All’ and ‘both’ in English are classified into the indicators of the whole entity. On the other hand, BM offers a slightly varied choice of vocabulary to serve as the counterpart for the quantifier ‘all’. They are ‘*semua*’, ‘*segala*’, ‘*sekalian*’, and ‘*seluruh*’. At the same time, ‘*kedua-dua*’ in BM is equivalent to ‘both’ in English. The invariant meanings of these words are discussed such as follows:

4.1.2.2.7(a) All, semua, segala, sekalian and seluruh

The invariant meanings of the grammatical items above are discussed based on their occurrences in the language samples below:

[72a] It's like [_{NP} **all** *the liquid*] comes out through your skin and you stink.

(Hari, J., *The Independent*, April 7 2009)

[72b] [_{NP} **All** *the people*] who couldn't succeed in their own countries end up here, and suddenly they're rich and promoted way above their abilities and bragging about how great they are.

(Hari, J., *The Independent*, April 7 2009)

[72c] Unfortunately, a few activities can be shut down for set periods, most being operational [_{NP} **all** *the year*] round.

(Data extracted from corpus)

The grammatical number analysis employed to the noun referents in the language samples above (i.e. [72a] to [72c]) shows that 'all' is applicable for all types of noun referents. The occurrence of a 'zero signal' for the noun entity '[72c] liquid-Ø' designates the conceptual definition of 'liquid' as 'ONE' entity. Although the semantic properties of 'liquid' do not illustrate the presence of physical discrete boundaries, this unstructured whole (i.e. mass referent) is conceptualised as 'ONE'. In the example [72b], the noun entity 'people-Ø' albeit signifying 'ONE', it means 'an aggregate of human beings', hence conceptualised as a plural referent (refer to [19]).

The noun number posited to '[72c] year-Ø' signifies the meaning of 'ONE' and the morphological identity '-Ø' conceptualises the noun entity as a singular referent that means 'a period of 12 months, measured from any particular time'. 'All' to some extent shares the semantic features of 'each' and 'every' as discussed in [68] and [69] where

these quantifiers are used to address all the noun referents. One of the elements which distinguishes ‘each’ and ‘every’ with ‘all’ is that ‘each’ and ‘every’ function to lay emphasis on individual entities but ‘all’ is used to quantify the noun referent as ‘one as a whole’. In line with that, the invariant meaning of ‘all’ is realised as ‘the whole of the countable and uncountable noun’ and this meaning when applied to the language samples above (i.e. [72a] to [72c]), produces the meaning of ‘[72a] the whole of the liquid’, ‘[72b] the whole of the people’ and ‘[72c] the whole of the year’ respectively.

[73a] *Golongan ini sepatutnya mendesak agar bahasa Melayu sebagai bahasa kebangsaan digunakan dalam [NP semua acara rasmi] kerajaan dan swasta!*

(Marhaini Kamaruddin, *Utusan Malaysia*, June 26 2009)

[73b] *Dan pastikan [NP semua pemimpin politik] bercakap terutamanya di Parlimen dalam bahasa kebangsaan yang sempurna bukannya cacamarba.*

(Marhaini Kamaruddin, *Utusan Malaysia*, June 26 2009)

[73c] *[NP Semua ayam] yang akan dijadikan bukti dikatakan mengalami luka di kepala, tubuh dan ia tidak boleh disimpan lebih lama kerana bimbang akan mati sebelum tarikh perbincangan, 21 Jun ini.*

(Data extracted from corpus)

‘*Semua*’ in BM is equivalent to ‘all’ in English. Therefore, ‘*semua*’ (tr. all) shares some similar semantic properties to that of ‘*setiap*’ (tr. each / every) which addresses all the noun referents without any exception. Despite this similarity, some distinctive elements which were found through the analysis of their use suggest that these quantifiers possess their own core values which differentiate them from one

another. ‘*Semua*’ (tr. all) is utilised to quantify the noun referent as ‘one as a whole’ whereas ‘*setiap*’ (tr. each / every) functions to emphasise on individual entities (refer to [72a] to [72c]). Sentence [73a], ‘*semua acara rasmi*’ (tr. all official occasions) shows the occurrence of this quantifier with an inanimate noun whereas ‘[73b] *semua pemimipin politik*’ (tr. all political leaders) designates the presence of ‘*semua*’ with animate (human) noun. At the same time, ‘[73c] *semua ayam*’ (tr. all chickens) denotes that ‘*semua*’ too functions to quantify an animate (non-human) noun referent. As for that reason, the invariant meaning of ‘*semua*’ is realised as ‘the whole of the animate and inanimate noun that is inclusive of individual entity’.

[74a] *Akhirnya Perhimpunan Agung UMNO Mac ini dijangka meleraikan [NP segala kekusutan].*

(Hassan Mohd Noor, *Utusan Malaysia*, March 9 2009)

[74b] *Anak-anak ini juga akan mengucapkan terima kasih kepada kerajaan kerana mendirikan Jaring dan [NP segala infrastruktur] yang membolehkan Malaysia menjadi negara berteknologi maklumat (IT).*

(Zin Mahmud, *Utusan Malaysia*, April 19 2009)

‘*Segala*’ (tr. all) is another type of indicator which represents the whole entity apart from ‘*semua*’. However, the linguistic data found which highlight its use indicate that ‘*segala*’ is more likely to occur in sentences which connotes the meaning of the types of the noun referent. For instance, ‘[74a] *segala kekusutan*’ is best described as ‘all sorts of confusion’ than ‘all confusion’. The use of both ‘*segala*’ and ‘*semua*’ are interchangeable in sentences but ‘*segala*’ seems to entail a force to the noun referent which features all of its type. In addition, based on the instances above, ‘*segala*’ only

appears with the inanimate noun which draws attention on the object's (inanimate noun) category. Therefore, its invariant meaning is realised as 'all kinds of inanimate noun'.

[75a] *Kalaulah Allah menghendaki, tentulah ia akan menjadikan [NP sekalian manusia] dalam agama Allah yang satu, menurut keadaan semula jadi mereka; akan tetapi Allah tidak berbuat demikian....*

(Data extracted from corpus)

[75b] *Saya mengucapkan setinggi-tinggi terima kasih, terutama kepada Datuk Zainuddin Maidin serta Tan Sri Kamarul Ariffin kerana bersusah-payah mengatur majlis pelancaran itu di bangunan Perpustakaan Negara serta [NP sekalian sahabat] dan teman yang begitu ramai menyerikan majlis itu.*

(Data extracted from corpus)

[76a] *Sehubungan itu, Timbalan Ketua Penerangan Umno negeri, Datuk Mohd Rozali Ishak meminta [NP seluruh rakyat], ahli Umno semua peringkat termasuk pemimpin dan wakil rakyat BN hadir pada majlis itu sebagai memberi sokongan padu ke arah mengembalikan kekuatan Umno Kelantan.*

(Data extracted from corpus)

[76b] *Melalui Internet, mereka boleh mengakses pelbagai bahan bacaan dari [NP seluruh dunia].*

(Zin Mahmud, Utusan Malaysia, April 19 2009)

The meaning of 'sekalian' although is similar to 'semua' which means 'all' (referring to the noun referent without any exception), the examples of its use which were extracted from the BM written corpus indicate that 'sekalian' only occurs to quantify the animate (human) noun referent as in '[75a] *sekalian manusia*' (tr. the whole human beings) and '[75b] *sekalian sahabat*' (tr. the whole bunch of friends).

Although ‘*sekalian*’ is applicable to quantify an animate (human) noun referent, this quantifier is not suitable to serve as a substitute for ‘*semua*’ in [73b] *semua pemimpin politik*’ (tr. all political leaders).

The noun referents which co-occur with ‘*sekalian*’ as in ‘*sekalian manusia*’ and ‘*sekalian sahabat*’ suggest that ‘*manusia*’ (tr. human being) and ‘*sahabat*’ (tr. friend) are realised as an identified referent which consists of several non-identical individual entities (physically discrete referents) which signifies the meaning of a single referent (one) as in the case of furniture. Hence, the meaning of ‘*manusia*’ (tr. human being) and ‘*sahabat*’ in this context is referred as ‘ONE’ of all of its kind despite physical traits and ethnicity. Subsequent to that, the invariant meaning of ‘*sekalian*’ is conceptualised as ‘the whole of the animate (human) noun; physically discrete referents as a single thing’.

‘*Seluruh*’ is another type of quantifier which indicates the whole entity. This quantifier co-occurs with both animate (human) noun referent as in ‘[76a] *seluruh rakyat*’ (tr. the whole citizens) and inanimate noun referent as in ‘[76b] *seluruh dunia*’ (tr. the whole world). ‘*Seluruh*’ was found interchangeable with ‘*sekalian*’ in ‘[76b] *seluruh rakyat*’. Thus, the invariant meaning of ‘*seluruh*’ is identified as ‘the whole of the animate (human) and inanimate noun; physically discrete referents as a single thing’.

4.1.2.2.7(b) Both and *kedua-dua*

The postulation of invariant meanings for the grammatical items above is shown below:

[77] Baker was busier than Ironside although [_{NP} **both** *goalkeepers*] were forced to bring off vital saves.

(Data extracted from corpus)

[78a] Mereka ditahan pada pukul 4 pagi, setelah menyamun dua pelajar perempuan berusia 14 tahun semasa [NP kedua-dua mangsa] menunggu bas di Sungai Gau, Temerloh, kelmarin.

(Data extracted from corpus)

[78b] Jika PPSMI diyakini berupaya meningkatkan kecekapan para pelajar menguasai [NP kedua-dua mata pelajaran] teras itu, maka bentangkan kewajarannya berserta alasan kukuh yang mampu mengikat hati ibu bapa.

(Utusan Malaysia, December 16 2008)

‘Both’ and ‘all’ share some similar semantic properties as they are used to refer to all the noun referents which are being quantified without any exception. Despite being similar in certain features, based on the Entity Number analysis, it is identified that ‘both’ only present to quantify plural referents. This is evident through the linguistic data ‘[77] both goalkeeper-s’ which highlights the presence of ‘-s’ as an indicator of ‘MORE THAN ONE’ entity. Moreover, in [77], ‘both’ serves as the anaphoric reference for ‘Baker’ and Ironside’ which results in the conceptualisation of its invariant meaning as ‘all two plural countable nouns’. ‘*Kedua-dua*’, its BM counterpart functions to quantify all types of noun referents (i.e. animate as in ‘[78a] *kedua-dua mangsa*’ which means ‘both victims’ and inanimate noun as in ‘[78b] *kedua-dua mata pelajaran*’ which means ‘both subjects’). Thus, the invariant meaning of ‘*kedua-dua*’ (tr. both) is identified as ‘all two animate and inanimate nouns’.

4.1.2.2.8 Indicators of Optional Entity

The indicators of optional entity such as ‘any’ and either’ posits the meaning of ‘ONE’ entity out of two or more options provided such as follows:

[79a] I keep thinking about a woman who told me she hadn't eaten [_{NP} **any** *fruit*] in four years.

(Hari, J., *The Independent*, April 7 2009)

[79b] We are showing how to be a modern Muslim country. We don't have [_{NP} **any** *fundamentalists*] here.

(Hari, J., *The Independent*, April 7 2009)

[79c] A prohibited steps order means an order that no step which could be taken by a parent in meeting his parental responsibility for a child and which is of a kind specified in the order shall be taken by [_{NP} **any** *person*] without the consent of the court.

(Data extracted from corpus)

[80a] There is a clear analogy to computers here which are only as good as the individuals who are responsible for their programs. An error in [_{NP} **either** *case*] results in chaos.

(Data extracted from corpus)

[80b] Press seam allowance to the wrong side on the lining and notch out in the same way. Pin the lining to the wrong side of the band and slipstitch in place. Sew a ring at [_{NP} **either** *end*], on lining side.

(Data extracted from corpus)

The grammatical number of '[79b] fundamentalist-s' signifies 'MORE THAN ONE' entity of 'fundamentalist' whereas the 'zero signal' for '[79c] person-Ø' posits the meaning of 'ONE' (i.e. singular referent but not mass), as the noun referent is defined as 'a human as an individual'. At the same time, 'any' also co-occurs with a mass referent as in '[79a] any fruit'. Reid (1991:53) proposes that 'fruit' is conceptualised as "a collective mass" as it consists of several non-identical individual

entities which share no similar form but a general similarity of purpose and characteristics (i.e. “botanically ripened ovaries”). In the first two examples, (i.e. [79a] and [79b]), the occurrence of ‘any’ with a mass referent and a plural referent respectively in negative statements portrays the meaning of ‘none’. At the same time, in [79c], ‘any’ which co-occurs with a singular referent indicates an indefinite option between several entities. These two cases reveal that ‘any’ in the first two examples (i.e. [79a] and [79b]) which means ‘none’ cannot be used interchangeably with ‘any’ in [79c] which means ‘an option’ as they do not have identical meanings. Accordingly, this study suggests that ‘any’ has two invariant meanings which are ‘one of the options between several singular countable nouns’ (i.e. indicator of individual entity) and ‘none of the plural countable and uncountable noun’ (i.e. indicator of zero entity).

On the other hand, the existence of ‘either’ as a quantifier is only evident when it precedes the count noun referent which signifies the meaning of ‘ONE’ (i.e. singular). This is apparently shown in example ‘[80a] either case-Ø’ and ‘[80b] either end-Ø’. The function of ‘any’ and ‘either’ is relatively same that is to indicate an option between several items presented. However, the presence of ‘any’ is perceptible in highlighting an option for two or more entities whereas this is not the case for ‘either’ which serves as an indicator of an option between two noun referents. For instance, when a speaker says “either book is allowed into the examination hall”, the intended message could be “any book (of two) is allowed into the examination hall.” This is rather different when a speaker says “any book (of three or more) is allowed into the examination hall”, where ‘either’ can never be employed as a substitute for ‘any’. Moreover, the linguistic data above (i.e. [79a] and [79b]) suggest that ‘any’ is conceptualised as ‘none’ which means ‘zero’ when it co-occurs with noun referent which denotes a negative statement.

The language samples (i.e. [80a] and [80]) indicate that ‘either’ also functions as ‘both’. ‘Either case’ and ‘either side’ could also be possibly stated as ‘both cases’ and

‘both sides’. For instance, when a speaker says “either book is allowed into the examination hall”, the meaning could be inferred as ‘both books are allowed into the examination hall.’ However, the intended message which is being communicated here suggests that although both books are allowed to be brought into the examination hall, this action should not be taking place simultaneously but rather consecutively which subsequently highlights the invariant meaning of ‘either’ as ‘one of the options between two singular countable nouns’. This meaning when applied to example [80b] indicates that the act of sewing at either side (also means both sides) cannot be done simultaneously but one after another.

4.1.2.2.9 Indicators of Zero Entity

‘Neither’ and ‘no’ are two of the quantifiers which are subsumed under the category of indicators of zero entity as these quantifiers denote the meaning of ‘zero’ which also means ‘none’, ‘vacant’, ‘empty’ and ‘nil’.

[81a] [NP **Neither** position], however, contains more than part of the truth.

(Data extracted from corpus)

[82a] [NP **No** child] is born evil.

(The Independent, September 5 2009)

[82b] You had these amazing big apartments, you had a whole army of your own staff, you pay [NP **no** taxes] at all.

(Hari, J., The Independent, April 7 2009)

[82c] Sheikh Maktoum built his showcase city in a place with [NP **no** useable water].

(Hari, J., The Independent, April 7 2009)

The ‘zero signal’ (i.e. \emptyset) in ‘[81a] neither position- \emptyset ’ denotes ‘ONE’ (i.e. singular countable) entity. At the same time, the grammatical number analysis employed to ‘[82a] no child- \emptyset ’, ‘[82b] no tax-s (i.e. taxes)’ and ‘[82c] no water- \emptyset ’ illustrates that ‘no’ appears to quantify all types of noun referents. The ‘- \emptyset ’ signal in both ‘child- \emptyset ’ and ‘water- \emptyset ’ although signifies ‘ONE’ entity, the ‘zero signal’ in ‘child’ (cognitively salient shape) indicates the noun referent as singular countable whereas the same signal denotes the semantic property of a mass referent in ‘water’ (no discrete physical boundaries).

From the analysis, the invariant meaning of ‘neither’ is determined as opposite to that of ‘either’. It is identified as ‘none of the options between two singular countable nouns as in ‘[81a] neither position’. Discussing on the semantic properties of ‘no’, it is also used to indicate ‘none’ which means ‘nil’ but there is no sign of occurrence of two noun referents to serve as the options as in ‘neither’. Therefore, the options presented could be two or more entities. Furthermore, ‘no’ and ‘any’ (i.e. in negative statement) share some similar semantic properties where both are used as indicators of zero entity (such as the example below). As such, the invariant meaning of ‘no’ is identified as ‘none of the countable and uncountable noun’.

We are showing how to be a modern Muslim country. We don't have [_{NP} **any** *fundamentalists*] here.

We are showing how to be a modern Muslim country. We have [_{NP} **no** *fundamentalists*] here.

In this study, the researcher explored only the functional words or grammatical items realised lexically. The lexical items however appear in the context of a sentence. Quantifiers like ‘no’, ‘either’, ‘neither’ or ‘any’ invoke certain context, for instance, “no book is available” can be literally translated as “*tiada buku yang ada.*” However, the presence of ‘*tiada*’ which also means ‘*tidak ada*’ in the beginning of the sentence

suggests that the use of ‘*yang ada*’ in this sentence is redundant. When this is omitted, ‘*tiada buku*’ carries the properties of a phrase (i.e. Noun Phrase [NP]) but not a complete sentence (which means it is unable to stand on its own). According to Nik Safiah Karim et al. (2008), BM consists of four syntactic structures (i.e. NP-NP, NP-VP, NP-ADJP and NP-PP), hence “no book is available” (Subject Verb Complement [SVC]) can be translated as “*tiada buku di sini*” (Noun Phrase [NP] – Prepositional Phrase [PP]). In this example, the presence of ‘*di sini*’ can be identified as a syntactic but not a semantic requirement and therefore, it might have an effect on the determiners used.

4.1.2.2.10 Another, enough and twice

In this study, there are three other quantifiers which are discussed individually. These quantifiers (i.e. another, enough and twice) were not classified into any of the groups as each of them holds a discrete semantic function.

[83a] Eventually, [_{NP} **another** *worker*] breaks the silence by adding: “I miss my country, my family and my land.”

(Hari, J., *The Independent*, April 7 2009)

[83b] In townships outside Durban [_{NP} **another** *three deaths*] were reported yesterday in continued fighting between supporters of the Zulu leader, Chief Mangosuthu Buthelezi, and the United Democratic Front.

(*Data extracted from corpus*)

The linguistic data above (i.e. ‘[83a] another worker-Ø’ and ‘[83b] another three death-s’) point out the use of this quantifier to quantify a singular referent (i.e. worker-Ø) and plural referent (i.e. death-s). It is essential to highlight that ‘another’ is always followed by a numeral to be used as a quantifier for a plural referent as in ‘[83b]

another three deaths’. The use of ‘another worker’ in [83a] indicates the presence of the singular referent (i.e. worker) in the preceding part or event of the sentence as the focus of discussion. Likewise, ‘another three deaths’ too signifies the presence of the ‘three deaths’ as the preceding topic of discussion which later suggests that the subsequent subject of discussion is on ‘more deaths’. Thus, the invariant meaning of ‘another’ is realised as ‘an additional or a different countable noun’.

[84a] Most of the Vietnamese in Hong Kong arrive in tiny boats with barely
[_{NP} **enough** *space*] to stretch out while sleeping on the decks.

(Data extracted from corpus)

[84b] Mr Major won [_{NP} **enough** useful *points*] in support of Britain’s well-
advertised aversion to punitive sanctions to have been able to brief
Sunday papers about a “British victory.”

(Data extracted from corpus)

The invariant meaning of ‘enough’ is determined as ‘sufficient quantity of plural countable and uncountable noun’. Sentence [84a] indicates the use of ‘enough’ as a quantifier of a mass referent (i.e. space-Ø). ‘Space’ in this context, is realised as a noun referent which does not have any cognitively salient shape. Moving on to ‘[84b] enough point-s’, the morphological identity ‘-s’ shows a plural referent which suggests ‘MORE THAN ONE’ entity of ‘point’. The non-existence of this quantifier to co-occur with a singular count referent denotes that, ‘enough’ does not function to feature an individual referent as it conveys the meaning of ‘as many as or as much as possible’.

[85a] As a guide, the depth of the swag and inner edges of the tails should be
approximately one sixth the overall curtain length, but the outer edge of
the tails should be at least [_{NP} **twice** *this depth*].

(Data extracted from corpus)

[85b] By 1946, the total of marketable government stock comfortably exceeded annual national income while the total national debt (including non-marketable debt and short-term instrument(s) was well in excess of [_{NP} **twice** national annual *income*].

(Data extracted from corpus)

The Entity Number System analysis which was employed to the noun referent in '[85a] twice this depth-Ø' and '[85b] twice annual income-Ø' shows the occurrence of the 'zero signal' to signify 'ONE' entity. Although signifying the meaning of 'ONE' in both instances, the 'Ø' signal holds the semantic function of a singular referent in '[85a] depth' (which means measurement) but a mass referent in '[85b] income' (which means money earned through business).

'Twice' too functions as indicators of fractions such as 'two-thirds' and 'half' which were discussed earlier in this study which function to denote the quantity of the portion of a noun referent (i.e. singular, plural and a mass referent). However, the meaning of 'twice' which is understood as 'double' suggests its invariant meaning as 'double the amount of countable and uncountable noun'.

4.1.3 Discussion

The findings of this study through the qualitative approach reveal that the identification of the entity number solely is insufficient for the postulation of invariant meaning of the demonstrative determiners (i.e. 'this', 'these', 'that', 'those' in English and '*itu*' and '*ini*' in BM). Although the role of the Entity Number is significant in determining the singular, plural or mass referents, this grammatical number analysis seems to be impractical to determine the proximity of the noun referents as this function of the demonstrative determiners is only explicable through the context of their occurrences.

Besides, the Entity Number System employed to the noun referents to identify the invariant meaning of the quantifiers in English and BM suggests that the deployment of the grammatical number both in English and BM is dissimilar. The grammatical number of the noun entity in English often synchronises with the semantic properties of the quantifiers which co-occur. The morphological identity ‘entity-Ø’ which means ‘ONE’ (i.e. singular or mass referent) and ‘entity-s’ (i.e. plural referent) which means ‘MORE THAN ONE’ of the noun referent often simultaneously indicate the meaning of the quantifiers that quantify these referents. For instance, the ‘-s’ signal reciprocates to the quantifiers ‘many’ in ‘many year-s’ and ‘a lot of’ in ‘a lot of forum-s’ that indicate ‘MORE THAN ONE’ entity (excluding the case of irregular plural such as ‘sheep-Ø’, ‘women-Ø’, etc. and mass referents such as ‘water-Ø’, ‘time-Ø’, etc.).

Nevertheless, in BM, the Entity Number System employed to the noun referent illustrates that all noun heads which co-occur with the quantifiers are signified as ‘ONE’ as in ‘*pelajar-Ø*’ and ‘*guru-Ø*’ despite the occurrence of the quantifiers which indicate ‘MORE THAN ONE’ entity such as ‘*ramai pelajar-Ø*’ (tr. many students) and ‘*ratusan guru-Ø*’ (tr. hundreds of teachers). The indication of plurality in BM is reflected either through the quantifiers which indicate ‘MORE THAN ONE’ without pluralising the noun head or through the reduplication of the noun head without the presence of any quantifiers. Hence, the Entity Number System suggests the morphological identity of ‘entity-entity’ for a BM noun referent to indicate plurality, for instance, ‘*pelajar-pelajar*’ (more than one student). In addition, the choice of the quantifier in BM depends on the classification of the noun whether animate (human), animate (non-human) or inanimate which is not applicable in English.

The results obtained throughout the analysis illustrate that the meaning of the noun referent and the message which is being communicated in the sentence is equally important to be traced in postulating the invariant meaning of the demonstratives and

quantifiers which co-occur. This is due to the presence of certain words as the noun referent that serves as problematical in the interpretation of the noun number (i.e. contrasting Entity Number signal as in ‘children-Ø’, ‘deer-Ø’ and ‘people-Ø’ and the spanned semantic opposition between ‘ONE’ and ‘MORE THAN ONE’ as in ‘politics-Ø’, ‘dynamics-Ø’, ‘scissors-Ø’ and ‘tights-Ø’). Moreover, the noun number does not have any effect in determining the precise amount (degree) of the quantifier (i.e. the scale whether big or small). Therefore, the context of occurrence needs to be taken into consideration in identification of the invariant meaning of the demonstratives and quantifiers in English and BM which have at least some difference if not salient in between them.

At the same time, the classification of the noun referent whether “too similar”, “sufficiently similar” or “too dissimilar” proposed by Reid (1991:73) although to certain extent may solve the problem of identifying the semantic properties of the noun referents, how these objects are observed and later perceived by the observer in the speech community becomes the crux of the problem. This perceptual problem which remains unresolved concludes that language is flexible and often inconsistent where rather than depending solely on the principles or *langue* of a language, it also depends on how the message is being communicated in context.

4.2 Quantitative Data Analysis (Research Question 2)

This section presents the results obtained through descriptive and inferential statistics which were performed on the scores obtained by the samples. As mentioned in Chapter III (see section 3.5, page 73), a two-layered analysis was employed to analyse the samples’ essays (i.e. method 1 and method 2). Throughout this chapter, two scores (i.e. score 1 and score 2) are presented to disclose the results attained through method 1 and method 2 respectively. The justification for using two methods (see

section 3.5, page 73) suggests that the scores achieved are trustworthy as the findings are generated not only through one way of interpretation but a two-layered analysis gives way for an alternative method of data interpretation (that may possibly be opted due to some limitations in the first method) which increases the reliability of the scores.

4.2.1 Descriptive Analysis

The measures of central tendency (i.e. mean, median and mode) are discussed to indicate the distribution of scores.

Table 4.2.1.1: English and Bahasa Malaysia (BM) Pre-test, Mid-test and Post-test Scores for the Experimental and Control Group

Subjects	Pre-test (%)				Mid-test (%)		Post-test (%)			
	English		BM		English	BM	English		BM	
	Score 1	Score 2	Score 1	Score 2			Score 1	Score 2	Score 1	Score 2
E1	53.33	21.05	90.32	93.33	70	92.5	60.87	35	93.33	87.5
E2	84.62	28.95	84.21	53.33	72	97.5	83.33	25	97.06	100
E3	76.67	60.52	92	76.67	78	95	59.26	40	95.45	100
E4	33.33	23.68	94.44	100	52	95	31.58	15	100	90.63
E5	62.5	39.47	92	76.67	68	90	61.54	60	79.17	59.38
E6	77.78	18.42	95.65	73.33	74	95	53.33	20	95.24	62.5
E7	71.43	13.16	91.67	100	86	97.5	83.33	25	93.18	100
E8	54.17	34.21	85.71	20	80	90	61.9	32.5	94.12	50
E9	81.25	34.21	93.55	96.67	54	92.5	57.14	30	95.12	100
E10	44.12	39.47	92.86	100	58	95	56.76	52.5	97.37	100
E11	40	10.53	83.33	50	56	95	43.75	17.5	93.33	87.5
E12	80.77	55.26	84.38	90	90	82.5	78.57	55	94.44	100
E13	66.67	26.32	100	33.33	78	87.5	55.88	47.5	96.97	100
E14	35.71	13.16	69.23	30	66	92.5	45	22.5	95	59.38
E15	50	42.11	93.1	90	72	95	80.95	42.5	97.14	100
E16	36.84	18.42	86.49	100	62	95	56.25	22.5	100	100
E17	75	31.58	91.43	100	70	95	100	10	94.44	100
E18	58.82	52.63	88.89	100	78	90	58.54	60	93.48	100
E19	37.5	7.89	85.71	60	62	95	66.67	5	96.43	84.38
E20	40	21.05	91.18	100	66	85	60.71	42.5	90.24	100

Table 4.2.1.1, continued

E21	71.43	52.63	100	80	82	95	85.29	72.5	91.18	96.88
E22	37.5	15.79	100	100	74	95	51.72	37.5	96.23	100
E23	64.71	31.58	95.45	70	80	95	69.23	67.5	88.1	100
E24	73.08	50	92	76.67	80	92.5	82.35	70	97.22	100
E25	17.39	21.05	82.86	96.67	60	87.5	52.38	82.5	88.37	100
E26	38.89	18.42	88.89	80	74	92.5	61.11	55	100	100
E27	33.33	13.15	90	60	78	90	69.64	97.5	95.56	100
E28	61.9	34.21	100	63.33	82	100	78.26	45	96.55	87.5
E29	56.25	23.68	87.5	70	88	92.5	58.82	25	95.35	100
E30	57.14	31.58	86.96	66.67	76	97.5	66.67	55	93.55	90.63
E31	38.46	26.32	78.95	50	66	85	58.62	42.5	93.94	96.88
E32	59.09	34.21	82.61	63.33	64	92.5	68.57	60	91.18	96.88
E33	62.79	71.05	92.11	100	82	97.5	80.39	100	97.44	100
E34	62.5	52.63	100	100	74	95	72.5	72.5	94.59	100
E35	35.71	13.16	83.33	50	80	95	41.67	25	90.63	90.63
E36	60	55.26	92.31	100	76	92.5	75.86	55	100	100
E37	38.89	18.42	95.24	66.67	72	92.5	60.98	62.5	92	71.88
E38	53.85	18.42	90.48	63.33	78	95	78.79	65	96.15	78.13
E39	35.14	34.21	100	100	76	95	72.73	60	95	100
C1	64.52	52.63	90.91	100	66	92.5	58.82	50	96	100
C2	83.33	26.32	96.67	96.67	66	70	85.71	30	95.45	65.63
C3	66.67	15.79	100	83.33	64	85	45.45	12.5	94.74	56.25
C4	43.75	36.84	66.67	46.67	66	92.5	38.24	32.5	81.08	93.75
C5	33.33	7.89	83.33	100	64	92.5	66.67	15	91.67	100
C6	43.48	26.32	87.1	90	66	92.5	35.71	25	95.12	100
C7	13.33	5.26	97.22	100	58	92.5	37.5	15	86.11	96.88
C8	45	23.68	96.55	93.33	58	92.5	38.1	40	89.8	100
C9	55	28.95	92.31	100	78	92.5	64.71	55	97.73	100
C10	55.88	50	94.44	100	72	90	54.05	50	97.73	100
C11	78.57	28.95	88.89	53.33	76	92.5	57.14	40	100	100
C12	41.6	13.16	93.55	96.67	72	92.5	41.02	40	94.87	100
C13	54.55	31.58	88.46	76.67	84	87.5	50	22.5	97.22	100
C14	64.1	65.79	95.74	100	82	92.5	80.95	42.5	93.33	87.5
C15	52	34.21	96	80	84	95	51.61	40	100	96.88

Table 4.2.1.1, continued

C16	53.33	21.05	77.14	90	84	85	37.5	7.5	88.46	71.88
C17	45.45	13.16	100	100	82	90	28.57	10	100	100
C18	60	15.79	100	100	82	92.5	85	42.5	100	100
C19	15.38	5.26	95.24	66.67	52	92.5	53.33	40	100	100
C20	44.44	31.58	90	90	78	95	53.33	40	96.97	100
C21	56.25	23.68	92	100	70	92.5	45.45	37.5	90.7	100
C22	61.54	42.1	87.5	100	76	90	67.65	57.5	92.86	100
C23	80	31.58	89.29	83.33	72	92.5	55	27.5	82.86	90.63
C24	72.72	21.05	89.19	100	76	92.5	67.74	52.5	100	100
C25	35.71	13.16	90.91	66.67	76	97.5	50	47.5	89.66	81.25
C26	0	0	84.62	100	64	92.5	20	5	75	65.63
C27	66.67	21.05	93.33	100	66	90	40	30	91.84	100
C28	50	10.53	86.67	86.67	62	90	66.67	40	96.97	100
C29	0	0	95.65	73.33	64	90	16.67	5	90.32	87.5
C30	45.45	26.32	73.81	100	72	92.5	38.1	40	94.44	100
C31	28.57	21.05	87.1	90	70	95	44.19	47.5	90.91	100
C32	25	13.16	97.22	100	72	82.5	50	27.5	88.89	100
C33	45.95	44.74	84.62	73.33	72	95	60	52.5	88.46	71.88
C34	80	10.53	71.43	33.33	62	90	33.33	5	100	56.25
C35	66.67	26.32	90.63	96.67	60	95	55.56	25	90.63	90.63
C36	43.24	42.1	87.1	90	68	95	50	47.5	81.82	84.38
C37	38.1	21.05	94.59	100	62	87.5	60.61	50	96.15	78.13

Table 4.2.1.1 shows that generally, most of the subjects have improved in their scores from the pre-test to post-test after receiving a 10 hour treatment. Despite the increased scores in the post-test, it is crucial to highlight some scores obtained by a number of subjects as these scores obtained through two different methods (i.e. score 1 and score 2) are substantially different. For instance, the scores (i.e. score 1) obtained by the subjects for the English pre-test (i.e. E2, E6, E7, E9) based on the first method of scoring are considerably higher than the scores obtained through the second method of scoring (i.e. score 2).

As explained in Chapter III (see section 3.5, page 73), the first method of scoring was executed by dividing the number of appropriate use of determiners upon the total number of occurrences in an individual student's essay. As such, the scores (i.e. score 1) achieved by the students are higher than their achievement in score 2 (i.e. the number of appropriate use is divided upon the predetermined number of determiners that should be used based on the instructions for the pre-test and post-test) where these students have used a limited number of determiners in their essays which inevitably preclude the occurrence of more inappropriate use. Hence, the instances where the scores have decreased from score 1 to score 2 are apparent in the scores attained by E8, E11, E13, E19 (i.e. BM pre-test), E2, E7, E11, E17, E19 (i.e. English post-test), E6, E8, E14 (i.e. BM post-test) for the experimental group and C2, C11, C18, C23, C24, C34 (i.e. English pre-test), C11, C19, C25 (i.e. BM pre-test), C2, C14, C18, C37 (i.e. English post-test) and C2, C3, C34 (i.e. BM post-test) for the control group. However, the decrease in scores from score 1 to score 2 is rather prevalent in English essays for both groups which indicates that the students faced difficulties in using the appropriate determiners (i.e. demonstratives and quantifiers) in their English writings.

On the other hand, for the BM essays, most of the students have achieved higher scores in the second method of scoring (i.e. score 2) compared to the first method (i.e. score 1). The instances where the scores have increased from score 1 to score 2 are apparent in the scores attained by E1, E4, E17, E20, E36, C1, C5, C16, C31, C37 (i.e. pre-test) and E2, E3, E18, E22, E33, E39, C4, C7, C20, C27, C30, C36 (i.e. post-test).

The pattern of the essays written in BM reveals that generally, the students have maximally utilised the determiners (i.e. demonstratives and quantifiers). Thus, based on the analysis using score 2 where the total number of determiners' use is predetermined, these students managed to score fairly higher in this method compared to the first method which poses emphasis on the total number of occurrences of the determiners in

an individual student's essay. Besides, most of the students in both groups have attained 100% in their scores (i.e. score 2). This leads to an assumption that the students did not face much difficulty when using the appropriate determiners (i.e. demonstratives and quantifiers) in their BM writings.

Each method of scoring (i.e. score 1 and score 2) is significant in its own way. As such, the researcher had to take a stance to employ the descriptive and inferential analyses for both scores throughout the study to identify the effectiveness of the treatment presented to the students in the experimental group.

4.2.1.1 A Comparison of the Central Tendencies between the Experimental and Control Group for English Pre-test and Post-test and BM Pre-test and Post-test (Score 1)

This section describes the comparison between the mean, median and mode scores of the experimental and control group for English pre-test and post-test and BM pre-test and post-test (i.e. score 1) (see Appendix, Figure 4.1, page 332). An increase of 10.83% which is identified from the mean scores of the pre-test and post-test for the experimental group as compared to control group which is only 2.02% reveals a convincing effect of the treatment which has taken place. Discussing on the median score, this has also improved from 56.25% in the pre-test to 61.54% in the post-test for the experimental group which defeats the median scores for the control group in both the pre-test and post-test that remained at 50%. The mode score for the experimental group in the pre-test that is 33.33% although lower than the most frequently occurring score for the control group; 66.67%, the experimental group has shown an increase of 33.34% in the mode score of the post-test which results in 66.67%. As there was no treatment provided for the control group, the mode score of this group has declined from 66.67% (pre-test) to 50% (post-test). Hence, the data interpretation through the first method (score 1) designates improved scores from that of the pre-test to post-test

within the experimental group as well as in between the groups (i.e. experimental and control group) which may lead to an inference that the semantic-based explicit contrastive grammar instruction does to certain extent have a positive effect in the use of demonstratives and quantifiers in the English noun phrases by the students in their writings.

For BM, the mean scores of the experimental group for the pre-test and post-test although higher than the mean scores obtained in the control group, the differences found between these two groups are rather minor (see Appendix, Figure 4.3, page 333). The average score of the post-test in the experimental group has improved 4.10% from the pre-test and at the same time, the difference of 1.57% between the post-test of the experimental and control group seems to be not evident. The same situation applies to the median scores of both groups where the differences found are rather insignificant with less than 1% for both the pre-test and post-test. Highlighting the mode scores in both groups, 100% becomes the most frequent score which occurs in the pre-test of the experimental group and post-test of both groups whereas the control group indicates 87.1% as the recurrent score in the pre-test.

Overall, the results obtained from the first method of analysis for the BM pre-test and post-test denote that the use of the semantic-based explicit contrastive grammar instruction although managed to see the difference between the scores produced by the subjects in both groups, it does not yield a significant development in the students' BM writings. This is rather predicted as the aim of the study in utilising the semantic-based approach in explicit contrastive grammar instruction (i.e. English and BM) is to develop the students' writing skills in producing English noun phrases but not BM noun phrases. It is vital to disclose that the BM demonstratives and quantifiers were taught to the students incidentally by comparing these grammatical devices with the English counterparts to develop the students' writing skills in English.

4.2.1.2 A Comparison of the Central Tendencies between the Experimental and Control Group for English Pre-test and Post-test and BM Pre-test and Post-test (Score 2)

This section discusses the comparison between the mean, median and mode scores of the experimental and control group for English pre-test and post-test and BM pre-test and post-test (i.e. score 2). An increase of 15.44% of mean score can be found through the result obtained by the subjects from the pre-test to post-test in the experimental group (see Appendix, Figure 4.2, page 332). In addition, for the pre-test and post-test, the average scores achieved by the students in the experimental group are higher than the control group (i.e. 30.97% and 24.4% for the pre-test and 46.41% and 33.72% for the post-test in the experimental and control group respectively). The median score for the experimental group in the pre-test is 28.95% compared to 23.68% for the control group. Although these scores have improved for both groups, the experimental group achieved 45% which is slightly better than the control group with 40% in the post-test. On the other hand, for the mode score, 21.05% and 40% are found to be the most frequently occurring scores in the control group for the pre-test and post-test. It is apparent to denote that these scores are higher than the mode scores of the experimental group which are 18.42% and 25% for the pre-test and post-test. The results achieved through the second method of analysis (score 2) too reveal that it is the experimental group which generally outperformed the control group and the students' writing skills (i.e. appropriate use of English demonstratives and quantifiers) have indeed improved to some extent after the treatment.

The second method of analysis for BM highlights that the mean score of the experimental group has improved from 76.92% in the pre-test to 92.07% in the post-test (see Appendix, Figure 4.4, page 333). However, the difference of the mean scores between the experimental and control group is less than 1% which is not very convincing. A difference of 20% is identified from the median scores of the

experimental and control group for the pre-test but both groups have maintained 100% as the median scores in the post-test. Moving on to the mode scores, the experimental and control group are seen to be equally good as 100% is retained as the most frequent score in both tests. Thus, this method too denotes an improvement in the students' scores in BM writings in the experimental group than the control group as well as from the pre-test to post-test within the groups although not apparent. As stated earlier (see section 4.2.1.1, page 159), it is not the aim of the study to see the effectiveness of the explicit contrastive grammar instruction to develop the BM writing skills but the BM grammatical devices are exposed to the students with their meanings to highlight the differences with their counterparts in English to improve their writing skills in English when producing English noun phrases.

4.2.1.3 A Comparison of the Central Tendencies between the Experimental and Control Group for English Mid-test and BM Mid-test

It is essential to provide a justification on the aim of the mid-test which was carried out in this study. Although the mid-test was conducted in the middle of the treatment, as the name suggests, it was not meant to measure the students' performance after a few hours of treatment to see their progress towards the post-test. The objective items were constructed in English and BM to test the students' understanding in distinguishing the grammatical devices (i.e. demonstratives and quantifiers) which are similar. These lexical items were paired by identifying the slight differences of their functions before tested on the students.

There was not much difference in the average scores obtained by the experimental and control group although the experimental group achieved higher scores (i.e. 72.67% for English and 93.08% for BM) than the control group (i.e. 70.23% for English and 91.01% for BM) (see Appendix, Figure 4.5, page 334). Likewise, the median scores obtained in the experimental group for both English and BM are 74%

and 95% which are slightly higher than the control group's median score that is 95% and 92.5% for English and BM respectively. Consequently, the scores which have occurred most frequently in the control group are lower (i.e. 72% for English and 92.5% for BM) than the experimental group which indicates 78% as the most frequently occurring score for the English mid-test and 95% as the most commonly produced scores by the students for the BM mid-test.

4.2.1.4 Inappropriate Use of Demonstratives and Quantifiers of the Experimental Group in the English Mid-test and BM Mid-test

The findings disclose that 'less / least' is the most problematic English quantifier pair for the students in the experimental group as there was 79.49% of inappropriate use identified for this pair (see Appendix, Figure 4.6, page 335). On the other hand, 'twice / two' serves as the least problematic (none) as there was no sign of inappropriate use by the students in the experimental group for this pair. The quantifier pairs (i.e. 'much / a lot of', 'a few / several', 'some / a little' and 'any / either') seem to appear tricky as more than half of the students (i.e. above 50%) in this group have made inappropriate choice between these pairs. At the same time, the results also illustrate that the students in this group did not face much difficulty in differentiating the quantifier pairs; 'a large amount of / a great number of', 'most / more', 'most / much', 'a few / a little', 'all / both' and 'another / some' as there were less than 10% of the students who have produced inappropriate choice of quantifier between these pairs.

On the other hand, '*masing-masing / ramai*' is identified as the most complicated BM quantifier pair for the students in this group as there was 64.86% of inappropriate use traced for this pair (see Appendix, Figure 4.8, page 337). Unlike the English quantifier pairs, the results of the BM mid-test indicate that most of the quantifier pairs in BM seem to be unproblematic as the students in the experimental group did not signify any significant attempt of choosing the inappropriate quantifier

between the pairs provided. This is revealed through the zero percentage of inappropriate use achieved by the students in the demonstrative pair (i.e. *'ini / itu'*) and quantifier pairs (i.e. *'sekeping / sehelai'*, *'sebuah / sebiji'*, *'seekor / sebuah'*, *'sebuah / sekeping'*, *'sekalian / seluruh'*, *'kedua-dua / setiap'*, *'seseorang / seorang'*, *'segala / semua'*, *'berguni-guni / banyak'*, *'ramai / para'*, *'banyak / ramai'*, *'beberapa / sedikit'*, *'semua / tiap-tiap'*, *'satu / sebuah'*, *'sekalian / semua'*, *'dua / satu'*, *'segala / pelbagai'* and *'tiga ratus / sepuluh ribu'*). The rest of the quantifier pairs show less than 36% of inappropriate use which is not significant to be emphasised. The results point out that most of the BM quantifier pairs are not tricky to the students except for the quantifier pair *'masing-masing / ramai'* which demands more explanation.

These findings were found to be beneficial in determining the most confusing pairs of quantifiers to the students in the experimental group and subsequently, these pairs were given more attention along the process of the treatment to the students.

4.2.1.5 Inappropriate Use of Demonstratives and Quantifiers of the Control Group in the English Mid-test and BM Mid-test

This section discusses the percentage of inappropriate use of the English quantifier pairs by the students in the control group. Similar to that of the experimental group, the students in control group also found the *'less / least'* pair as the most confusing quantifier pair as there was 94.49% of inappropriate use discovered (see Appendix, Figure 4.7, page 336). In contrary to the experimental group, *'another / some'* was determined as the least or not at all problematic as there was zero percentage of inappropriate use occurred. The demonstrative pair (i.e. *'that / those'*) as well as the quantifier pairs (i.e. *'many / much'*, *'many / a plenty of'*, *'a number of / fewer'*) too appear confusing and hence, need attention as more than half of the students in this group did not make the right attempt when choosing the best option between these pairs. Despite this, the quantifier pairs (i.e. *'a large amount of / a great number of'*, *'an*

abundance of / the majority of', 'lots of / much', 'most / more', 'most / much', 'a few / a little', 'half / two-thirds' and 'all / both') seem to be less problematical to the students as these pairs only indicate less than 10% of inappropriate use.

The findings of both experimental and control group show that 'a large amount of / a great number of', 'most / more', 'most / much', 'a few / a little' and 'all / both' are the quantifier pairs which are less confusing to the students that may require less attention during the process of the treatment. On the other hand, the demonstrative and quantifier pairs which designate more than 50% of inappropriate use in both groups (i.e. 'that / those', 'less / least', 'much / a lot of', 'a few / several', 'some / a little', 'any / either', 'many / much', 'many / a plenty of' and 'a number of / fewer') suggest that more attention is required to highlight the meaning of these pairs to the students in the treatment process.

For BM, the students in this group also found '*masing-masing / ramai*' quantifier pair as the most problematical (see Appendix, Figure 4.9, page 338). The percentage of inappropriate use of this quantifier pair in the control group was identified as 64.86%. At the same time, the zero percentage of inappropriate use identified for the demonstrative pair (i.e. '*ini / itu*') and quantifier pairs (i.e. '*sekeping / sehelai*', '*sebuah / sebiji*', '*seekor / sebuah*', '*segala / seluruh*', '*sebuah / sekeping*', '*sekalian / seluruh*', '*seseorang / seorang*', '*segala / semua*', '*berguni-guni / banyak*', '*banyak / ramai*', '*beberapa / sedikit*', '*sesetengah / setengah*', '*semua / tiap-tiap*' and '*satu / sebuah*') suggest that these demonstrative and quantifier pairs in BM are easily distinguishable. The quantifier pairs which were not mentioned above although signify the percentage of inappropriate use as less than 46%, these less troublesome quantifier pairs (i.e. '*seseorang / seorang*', '*jutaan / banyak*', '*ribuan / ramai*', etc.) were also highlighted in the treatment process. Thus, the results of the BM mid-test obtained both from the experimental and control group highlight that the majority of the BM demonstrative and

quantifier pairs are not problematical as there was no significant percentage of inappropriate use of these pairs recognised except for ‘*masing-masing / ramai*’ which necessitates more explanation.

4.2.1.6 Inappropriate Use of the Demonstratives of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

The percentages of inappropriate use which occurred for the experimental group for the post-test signify that the treatment did not have any positive effect in developing the students’ use of ‘these’ and ‘those’ from pre-test to post-test as there was no sign of decline in the percentage (see Appendix, Figure 4.10, page 339). However, the use of ‘this’ and ‘that’ has indicated some improvement from pre-test to post-test in the experimental group. For the control group, surprisingly the use of ‘this’, ‘these’ and ‘those’ has designated some development except for ‘that’ although no treatment was provided. For these demonstratives, most of the inappropriate uses occurred when the students use ‘these’ and ‘those’ to explain the singular and mass referents whereas ‘this’ and ‘that’ for plural referents such as follows:

Table 4.2.1.6.1: Inappropriate Use of English Demonstratives

Demonstratives	Inappropriate Use			Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	
this	-	-	trips	this trip
	-	-	children	this child
	-	-	animals	this animal
	-	-	both boys	this boy
that	-	-	weeks	that week
	-	-	articles	that article
	-	-	woods	that wood
	-	-	activities	that activity
these	flower	-	-	these flowers
	book	-	-	these books
	accident	-	-	these accidents
	-	food	-	these foods
those	place	-	-	those places
	day	-	-	those days
	-	time	-	this / that time

Discussing on the demonstratives in BM, the students in both groups did not find any difficulties in utilising these grammar items (i.e. ‘*itu*’ and ‘*ini*’) as there was no inappropriate use found except for the control group students who have indicated 1.1% of inappropriate use (i.e. inappropriate context) in the pre-test (see Appendix, Figure 4.11, page 339). However, this percentage has decreased to a zero in the post-test which suggests that much attention is perhaps not needed to expose these items to the students to develop their use in writings as these grammar items seem to be not complicated. The appropriate use of the English and BM demonstratives can be realised through their invariant meanings that have been discussed in the qualitative analysis of this study.

4.2.1.7 Inappropriate Use of the Partitives of the Experimental and Control Group in English Pre-test and Post-test

The students in both groups have improved in their use of ‘a piece of’ and ‘a slice of’ as the percentage of inappropriate use has declined from pre-test to post-test. Nevertheless, there was no improvement in the students’ use of ‘an item of’ for the experimental group as there was no decline in the percentage of inappropriate use (see Appendix, Figure 4.12, page 340). The occurrence of the inappropriate use of these partitives is due to the use of these grammar items to quantify a singular and plural referent such as the following examples. These uses do not coordinate with the invariant meaning identified for each of these partitives (see section 4.1.2.2.1, page 90), hence resulted in inappropriate use.

Table 4.2.1.7.1: Inappropriate Use of the Partitives

Partitives	Inappropriate Use		Plausible Use (in context)
	Singular Referent	Plural Referent	
a piece of	motorcycle	-	a motorcycle
a slice of	-	cakes	a slice of cake
an item of	-	clothes	an item of clothing

4.2.1.8 Inappropriate Use of the Classifiers of the Experimental and Control Group in BM Pre-test and Post-test

This section provides explanation on the inappropriate use of classifiers by the experimental and control group in both tests (see Appendix, Figure 4.13, page 340). The students in the experimental group have improved in the use of ‘*sehelai*’, ‘*sebiyi*’, ‘*seorang*’ and ‘*sebuah*’ from pre-test to post-test. Likewise, the use of classifiers like ‘*sehelai*’, ‘*seorang*’, ‘*seseorang*’, ‘*sebuah*’ and ‘*sebatang*’ have also indicated development for the control group.

Generally, the inappropriate uses of these classifiers traced in the students’ essays indicate the use of these classifiers to quantify inappropriate noun referents such as in the table below. There were also some missing classifiers found where the students did not include classifiers when necessary. From the analysis, ‘*seekor*’ (singular animate [animal] noun) was found as one of the classifiers which does not require a detailed instruction of its appropriate use as there was no inappropriate use identified in both groups in both tests.

Table 4.2.1.8.1: Inappropriate Use of the Classifiers

Classifiers	Inappropriate Use	Plausible Use (in context)
<i>sebuah</i>	<i>sebuah jalan</i>	<i>sebatang jalan</i> (road: long inanimate)
	<i>sebuah sungai</i>	<i>sebatang sungai</i> (river: long inanimate)
<i>sebatang</i>	<i>sebatang pagar</i>	<i>sebuah pagar</i> (fence: big 3D inanimate)
<i>sehelai</i>	<i>sehelai cek</i>	<i>sekeping cek</i> (cheque: flat 2D inanimate)
<i>seorang</i>	<i>seorang bidadari</i>	<i>satu bidadari</i> (angel: animate: non-human)
<i>sebiyi</i>	<i>sebiyi bas</i>	<i>sebuah bas</i> (bus: big 3D inanimate)
<i>seseorang</i>	<i>seseorang penumpang</i>	<i>seorang penumpang</i> (passenger: an identified human referent).

4.2.1.9 Inappropriate Use of the Quantifiers (indicators of large entity) of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

The percentages of inappropriate use obtained by the students in the experimental group for the use of ‘thousands of’, ‘many’, ‘a large number of’, ‘a large amount of’, ‘a great number of’, ‘the majority of’, ‘an abundance of’, ‘plenty of’, ‘a lot of’, ‘lots of’, ‘much’, ‘more’ and ‘most’ have deteriorated from pre-test to post-test (see Appendix, Figure 4.14, page 341, Figure 4.17, page 343 and Figure 4.18, page 344). This is rather convincing as it leads to a generalisation that the treatment did influence the use of these quantifiers as there was improvement in the students’ use of these items. However, the experimental group did not show any improvement in the use of ‘hundreds of’ as the percentage of inappropriate use of this grammar item in post-test has defeated the percentage in pre-test (which means no development) while there was no difference in the percentage of inappropriate use from pre-test to post-test for ‘a great deal of’. Despite being the control group where there was no treatment provided, the students in this group have also improved in the use of these quantifiers. This is illustrated through the drop in the percentages of inappropriate use for ‘hundreds of’, ‘thousands of’, ‘many’, ‘a large amount of’, ‘a great number of’, ‘a great deal of’, ‘the majority of’, ‘a lot of’, ‘lots of’ and ‘most’ from pre-test to post-test.

The zero percentages attained for the inappropriate use of ‘numerous’ and ‘various’ in pre-test designate that these quantifiers were not present in any of the students’ writings as these quantifiers were only included in the list of quantifiers for the post-test (see Appendix, Figure 4.28, page 349). There was no difference in the percentage of inappropriate use obtained by the experimental and control group for the use of ‘numerous’. However, the 47.06% of inappropriate use found in the experimental group compared to 100% in the control group for the use of ‘various’ is convincingly indicating some positive effects of the treatment which has taken place. The

inappropriate uses discovered from the students' writings are all associated with the use of these quantifiers to quantify inappropriate noun referents such as provided below:

Table 4.2.1.9.1: Inappropriate Use of the Indicators of Large Entity (English)

Quantifiers (Indicators of Large Entity)	Inappropriate Use			Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	
hundreds of	cow	-	-	hundreds of cows
	worker	-	-	hundreds of workers
	building	-	-	hundreds of buildings
thousands of	bird	-	-	thousands of birds
	subject	-	-	thousands of subjects
	tourist	-	-	thousands of tourists
	-	cake	-	plenty of cake
many	-	rice	-	plenty of rice
	-	food	-	plenty of food
	student	-	-	many students
	house	-	-	many houses
	-	-	-	-
a large number of	car	-	-	a large number of cars
	victim	-	-	a large number of victims
	-	cake	-	a large amount of cake
	-	money	-	a large amount of money
a large amount of	girl	-	-	a large number of girls
	visitor	-	-	a large number of visitors
	-	-	eggs	a large number of eggs
	-	-	people	a large number of people
a great number of	-	money	-	a great deal of money
	tourist	-	-	a great number of tourists
a great deal of	-	-	people	a great number of people
	place	-	-	a great number of places

Table 4.2.1.9.1, continued

the majority of	shop	-	-	the majority of shops
	student	-	-	the majority of students
an abundance of	flower	-	-	an abundance of flowers
	friend	-	-	an abundance of friends
plenty of	item	-	-	plenty of items
	river	-	-	plenty of rivers
a lot of	shop	-	-	a lot of shops
	strawberry	-	-	a lot of strawberries
	item	-	-	a lot of items
	lorry	-	-	a lot of lorries
lots of	biscuit	-	-	lots of biscuits
	customer	-	-	lots of customers
	house	-	-	lots of houses
	butterfly	-	-	lots of butterflies
more	flower	-	-	more flowers
	friend	-	-	more friends
most	book	-	-	most books
	passenger	-	-	most passengers
	house	-	-	most houses
	car	-	-	most cars
much	friend	-	-	many friends
	car	-	-	many cars
	-	-	activities	many activities
	-	-	responsibilities	many responsibilities
numerous	experience	-	-	numerous experiences
	-	food	-	plenty of food
various	-	food	-	various foods
	place	-	-	various places

For BM, the semantic-based explicit contrastive grammar instruction marked an improvement in the students' use of '*ratusan*', '*ribuan*', '*beribu-ribu*', '*banyak*', '*para*' and '*ramai*' in the experimental group from pre-test to post-test as the percentages of inappropriate use have declined from pre-test to post-test (see Appendix, Figure 4.15, page 342 and Figure 4.16, page 343). At the same time, the control group has also signified some development in the use of '*ratusan*', '*beratus-ratus*', '*beribu-ribu*',

'*berguni-guni*', '*banyak*', '*para*' and '*ramai*' from pre-test to post-test. From the analysis, there was no inappropriate use of '*beratus-ratus*' identified in both tests for the experimental group which signifies that this quantifier is not at all problematic to the students when it is used in writings. Some of the errors encountered in the students' writings indicate the use of these quantifiers to quantify reduplicated noun referents (where no noun reduplication is needed as the quantifiers are indicating 'MORE THAN ONE' entity) and also the use of these quantifiers in inappropriate contexts such as illustrated in the table below (Table 4.2.1.9.2).

The quantifiers, '*pelbagai*' and '*masing-masing*' were only included in the list of quantifiers for the post-test. The attempts of using '*pelbagai*' in the post-test have directed to 8.11% of inappropriate use in both groups (see Appendix, Figure 4.29, page 350). The experimental group did not make any correct attempt in using '*masing-masing*' in their post-tests as there was no appropriate use identified. In contrast, the control group's effort to employ this quantifier has resulted in zero inappropriate use (which means there was no inappropriate use identified). The reduplicated noun referents that follow the quantifier '*pelbagai*' as in '*pelbagai barang-barang*' (tr. various things) and '*pelbagai agensi-agensi*' (tr. various agencies) resulted in inappropriate use as this is not allowed in BM (refer to the qualitative analysis). As for the use of '*masing-masing*', most of the errors occurred due to the presence of this quantifier independently without any noun referent that follows.

Table 4.2.1.9.2: Inappropriate Use of the Indicators of Large Entity (BM)

Quantifiers (Indicators of Large Entity)	Inappropriate Use		Plausible Use (in context)
	Reduplicated Noun Referent	Inappropriate Context	
<i>ratusan</i>	-	<i>ratusan orang ramai</i> (tr. hundreds of people)	<i>ratusan orang</i>

Table 4.2.1.9.2, continued

	<i>ratusan jenis artifak-artifak</i> (tr. hundreds of artefacts)	-	<i>ratusan jenis artifak</i>
<i>ribuan</i>	<i>ribuan mayat-mayat</i> (tr. thousands of corpses)	-	<i>ribuan mayat</i>
<i>beribu-ribu</i>	-	<i>beribu-ribu orang ramai</i> (tr. thousands of people)	<i>beribu-ribu orang</i>
<i>jutaan</i>	<i>jutaan pokok-pokok</i> (tr. millions of trees)	-	<i>jutaan pokok</i>
<i>ribuan</i>	-	<i>ribuan keringat</i> (tr. thousands of sweat)	<i>banyak keringat</i>
<i>beratus-ratus</i>	-	<i>beratus-ratus sampah</i> (tr. hundreds of rubbish)	<i>banyak sampah</i>
<i>jutaan</i>	-	<i>jutaan bunyi</i> (tr. millions of sounds)	<i>pelbagai jenis bunyi</i>
<i>banyak</i>	<i>banyak kedai-kedai</i> (tr. a lot of shops)	-	<i>banyak kedai</i>
	<i>banyak pokok-pokok</i> (tr. many trees)	-	<i>banyak pokok</i>
	<i>banyak aktiviti-aktiviti</i> (tr. a lot of activities)	-	<i>banyak aktiviti</i>
<i>ramai</i>	<i>ramai kawan-kawan</i> (tr. a lot of friends)	-	<i>ramai kawan</i>
	<i>ramai saudara-mara</i> (tr. a lot of relatives)	-	<i>ramai saudara</i>
<i>para</i>	<i>para guru-guru</i> (tr. many teachers)	-	<i>para guru</i>
	<i>para ahli-ahli</i> (tr. many members)	-	<i>para ahli</i>
<i>berguni-guni</i>	-	<i>berguni-guni kata semangat</i> (tr. sackfuls of words of wisdom)	<i>banyak kata semangat</i>
	-	<i>berguni-guni sumbangan</i> (tr. sackfuls of contribution)	<i>banyak sumbangan</i>

4.2.1.10 Inappropriate Use of the Quantifiers (indicators of small entity) of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

The students in the experimental group have indicated some improvement in the use of ‘a little’, ‘less’, ‘some’, ‘a couple of’ and ‘a number of’ from pre-test to post-test

(see Appendix, Figure 4.19, page 345 and Figure 4.21, page 346). Similarly, the students in the control group have improved in their appropriate use of ‘a little’, ‘less’, ‘some’, ‘several’ and ‘a number of’ except for ‘a couple of’. The experimental group however did not show any progress in the use of ‘several’ after the treatment. On the other hand, there was no occurrence of ‘least’ identified in any of the students’ writings in both groups. The instances of use of the indicators of small entity in the students’ writings that were found to be inappropriate are listed in the table below (Table 4.2.1.10.1).

The use of indicators of small entity in BM for the experimental group did not signify any development except for ‘*sedikit*’ (see Appendix, Figure 4.20, page 345). However, the control group has shown some development in the use of ‘*sedikit*’ and ‘*beberapa*’. There was no development traced for the use of ‘*sesetengah*’ in both groups from pre-test to post-test. The most commonly encountered inappropriate uses of these quantifiers are such as indicated below which were due to unnecessarily reduplicated noun referents and the use of these quantifiers to quantify noun referents in inappropriate contexts (Table 4.2.1.10.2).

Table 4.2.1.10.1: Inappropriate Use of the Indicators of Small Entity (English)

Quantifiers (Indicators of Small Entity)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
a little	worker	-	-	-	a few workers
	-	-	children	-	a few children
	-	-	people	-	a few people
a bit of	-	-	people	-	a number of people
	butterfly	-	-	-	several butterflies
	bus	-	-	-	a few buses
less	-	-	children	-	fewer children
	-	-	people	-	fewer people
some	-	-	-	book	some books
	-	-	-	friend	some friends
	-	-	-	product	some products
	-	-	-	man	some men

Table 4.2.1.10.1, continued

several	-	money	-	-	a bit of money
	-	time	-	-	a little time
	day	-	-	-	several days
fewer	tourist	-	-	-	fewer tourists
	-	time	-	-	less time
	-	water	-	-	less water
a number of	student	-	-	-	a number of students
	-	bread	-	-	a bit of bread
	-	tea	-	-	a bit of tea
a couple of	leader	-	-	-	a couple of leaders
	bird	-	-	-	a couple of birds
	-	food	-	-	a little food
a few	girl	-	-	-	a few girls
	month	-	-	-	a few months
	-	sugar	-	-	a little sugar
fewest	flower	-	-	-	fewest flowers
	-	food	-	-	least food
	-	spirit	-	-	least spirit

Table 4.2.1.10.2: Inappropriate Use of the Indicators of Small Entity (BM)

Quantifiers (Indicators of Small Entity)	Inappropriate Use		Plausible Use (in context)
	Reduplicated Noun Referent	Inappropriate Context	
<i>sesetengah</i>	<i>sesetengah kawan-kawan</i> (tr. some friends)	-	<i>sesetengah kawan</i>
<i>beberapa</i>	<i>beberapa badan-badan</i> (tr. a few agencies)	-	<i>beberapa badan</i>
<i>sedikit</i>	-	<i>sedikit tubuh</i> (tr. a little body)	<i>beberapa bahagian di tubuh</i> (tr. a few parts of the body)

4.2.1.11 Inappropriate Use of the Quantifiers (cardinal numbers) of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

The percentages of inappropriate use of ‘one’ and ‘two’ which were lower in post-test compared to pre-test in the experimental group signify that the students’ use of these quantifiers have improved after the treatment (see Appendix, Figure 4.22, page

346). Likewise, the control group's use of 'two' has also indicated some development from pre-test to post-test.

For BM, the students in the experimental group have only improved in their use of 'satu / se' and 'sepuluh ribu' whereas the control group has achieved improvement in the use of 'satu / se', 'dua' and 'tiga ratus' (see Appendix, Figure 4.23, page 347). From the analysis, there was no inappropriate use identified for 'sejuta' by both groups in both tests. The use of these quantifiers resulted in errors when they were employed by the students to quantify inappropriate noun referents in inappropriate contexts (Table 4.2.1.11.1 and 4.2.1.11.2).

Table 4.2.1.11.1: Inappropriate Use of the Cardinal Numbers (English)

Quantifiers (Cardinal Numbers)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
two	day	-	-	-	two days
	man	-	-	-	two men
one	-	-	books	-	one book
	-	-	girls	-	one girl

Table 4.2.1.11.2: Inappropriate Use of the Cardinal Numbers (BM)

Quantifiers (Cardinal Numbers)	Inappropriate Use		Plausible Use (in context)
	Reduplicated Noun Referent	Inappropriate Context	
<i>dua</i>	-	<i>dua pasang suami isteri</i> (tr. two pairs of husband and wife)	<i>sepasang suami isteri</i> (tr. a pair of husband and wife)
<i>dua puluh</i>	<i>dua puluh rakan-rakan</i> (tr. twenty friends)	-	<i>dua puluh rakan</i>
<i>tiga ratus</i>	-	<i>tiga ratus batang jagung</i> (tr. three hundred [classifier] corn)	<i>tiga puluh batang jagung</i> (tr. thirty [classifier] corn)

4.2.1.12 Inappropriate Use of the Quantifiers (indicators of fractions) of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

For the use of ‘two-thirds’ and ‘half’ from pre-test to post-test, the experimental group did not mark any development unlike the students in the control group who have improved in the percentage of appropriate use (see Appendix, Figure 4.22, page 346). Discussing on the indicators of fractions in BM, the findings show that the students in the experimental group have benefited from the treatment to minimize the percentage of inappropriate use for the indicators of fractions like ‘*dua pertiga*’, ‘*setengah*’ and ‘*separuh*’ from pre-test to post-test whereas the control group has achieved some improvement in the use of ‘*dua pertiga*’ and ‘*separuh*’ (see Appendix, Figure 4.24, page 347). Most of the inappropriate uses of these indicators of fractions traced in the students’ writings occurred due to context inappropriacy such as in the table below:

Table 4.2.1.12.1: Inappropriate Use of the Indicators of Fractions (English)

Quantifiers (Indicators of Fractions)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
half	-	-	-	of this patient	half of this patient’s body
	-	-	-	house	half the house
two-thirds	-	-	-	from every guest	two-thirds from the guests
	-	-	-	of cake	two-thirds of this cake

Table 4.2.1.12.2: Inappropriate Use of the Indicators of Fractions (BM)

Quantifiers (Indicators of Fractions)	Inappropriate Use		Plausible Use (in context)
	Reduplicated Noun Referent	Inappropriate Context	
<i>setengah</i>	-	<i>setengah khemah</i> (tr. half the tent)	<i>sesetengah khemah</i> (tr. some tents)
	-	<i>setengah pelancong</i> (tr. half the tourist)	<i>sesetengah pelancong</i> (tr. some tourists)
	-	<i>setengah petang</i> (tr. half the evening)	<i>sesetengah petang</i> (tr. some evenings)
<i>dua pertiga</i>	-	<i>dua pertiga darah</i> (tr. two thirds the blood)	<i>dua pertiga daripada 6 pint darah</i> (tr. two thirds from 6 pints of blood)
	-	<i>dua pertiga pandangan</i> (tr. two-thirds the view)	<i>dua pertiga daripada seluruh pandangan</i> (tr. two- thirds the whole view)
<i>separuh</i>	-	<i>separuh kaki</i> (tr. half the leg)	<i>separuh daripada seluruh kaki</i> (tr. half the whole leg)

4.2.1.13 Inappropriate Use of the Quantifiers (indicators of individual entity) of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

The findings indicate that the experimental group has improved in their use of ‘every’. This is apparent through the percentage of inappropriate use which has dropped from pre-test to post-test (see Appendix, Figure 4.25, page 348). The students in the control group have also performed fairly well in the use of ‘every’ as the percentage of inappropriate use has declined from pre-test to post-test. Besides, for BM, the use of ‘*tiap-tiap*’ has signified a progress from pre-test to post-test in the experimental and control group while the use of ‘*setiap*’ has marked a development only in the experimental group (see Appendix, Figure 4.26, page 348). All the inappropriate uses

discovered in the students' writings were due to the use of these quantifiers to quantify inappropriate noun referents in inappropriate contexts (Table 4.2.1.13.1).

Table 4.2.1.13.1: Inappropriate Use of the Indicators of Individual Entity (English and BM)

Quantifiers (Indicators of Individual Entity)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
each	-	-	cousins	-	each cousin
	-	-	students	-	each student
	-	beef	-	-	each piece of beef
every	-	-	clothes	-	every type of clothes
	-	-	characteristics	-	every characteristic
	-	-	teachers	-	every teacher
<i>tiap-tiap</i>	-	-	-	<i>tiap-tiap jantung</i> (tr. every heart)	<i>tiap-tiap degupan jantung</i> (tr. every heart beat)

4.2.1.14 Inappropriate Use of the Quantifiers (indicators of the whole entity) of the Experimental and Control Group in English Pre-test and Post-test and BM Pre-test and Post-test

The students in the experimental group have improved in their use of all the items in this category (i.e. 'all', 'both', '*semua*', '*segala*', '*sekalian*', '*seluruh*' and '*kedua-dua*'). The control group however has also improved in the use of five of these items (i.e. 'both', '*semua*', '*segala*', '*sekalian*' and '*seluruh*') from pre-test to post-test (see Appendix, Figure 4.25 and 4.26, page 348). The inappropriate uses of these quantifiers occurred when the BM noun referents were unnecessarily reduplicated and used in inappropriate contexts (see Table 4.2.1.14.2). For English, these quantifiers

were used to quantify inappropriate noun referents in inappropriate contexts (Table 4.2.1.14.1).

Table 4.2.1.14.1: Inappropriate Use of the Indicators of the Whole Entity (English)

Quantifiers (Indicators of the Whole Entity)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
both	story	-	-	-	both stories
	parent	-	-	-	both parents
	side	-	-	-	both sides
all	-	-	-	friend	all friends
	-	-	-	daughter	all daughters

Table 4.2.1.14.2: Inappropriate Use of the Indicators of the Whole Entity (BM)

Quantifiers (Indicators of the Whole Entity)	Inappropriate Use		Plausible Use (in context)
	Reduplicated Noun Referent	Inappropriate Context	
<i>semua</i>	<i>semua mangsa-mangsa</i> (tr. all victims)	-	<i>semua mangsa</i>
	<i>semua rakan-rakan</i> (tr. all friends)	-	<i>semua rakan</i>
<i>sekalian</i>	<i>sekalian gadis-gadis</i> (tr. all maidens)	-	<i>sekalian gadis</i>
<i>seluruh</i>	<i>seluruh rakan-rakan</i> (tr. all / entire friends)	-	<i>seluruh rakan</i>
		<i>seluruh jantung</i> (tr. all / entire heart)	<i>seluruh bahagian jantung</i> (tr. all parts of the heart)

4.2.1.15 Inappropriate Use of the Quantifiers (indicators of optional entity) of the Experimental and Control Group in English Pre-test and Post-test

The experimental group has only improved in the use of one (i.e. ‘any’) of the two items in this category whereas the control group did not signify any improvement (see Appendix, Figure 4.25, page 348). Some of the inappropriate uses identified in this group are such as follows:

Table 4.2.1.15.1: Inappropriate Use of the Indicators of Optional Entity

Quantifiers (Indicators of Optional Entity)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
any	-	-	-	staff	no staff
	-	-	-	people	any person
	-	-	-	house	either house
either	-	-	-	attitude	any attitude
	-	-	-	expression	any expression

4.2.1.16 Inappropriate Use of the Quantifiers (indicators of zero entity) of the Experimental and Control Group in English Pre-test and Post-test

There was no development detected in the use of ‘neither’ and ‘no’ for the experimental group despite the treatment unlike the control group which has developed in the use of ‘no’ from pre-test to post-test (see Appendix, Figure 4.27, page 349). The use of these quantifiers resulted in errors when they were employed by the students to quantify inappropriate noun referents as in the table below:

Table 4.2.1.16.1: Inappropriate Use of the Indicators of Zero Entity

Quantifiers (Indicators of Zero Entity)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate Context	
neither	-	-	people	-	no people
	-	-	-	friend	no friend
no	-	-	-	honesty	no symbol of honesty

4.2.1.17 Inappropriate Use of the Quantifiers (i.e. another, enough and twice) of the Experimental and Control Group in English Pre-test and Post-test

There was no development achieved in the use of ‘another’ and ‘enough’ for the experimental group but the control group has shown some improvement in the use of ‘another’ from pre-test to post-test. Moreover, there was no inappropriate use of ‘twice’ identified in both groups for pre-test as this quantifier was only added into the list of

quantifiers in post-test (see Appendix, Figure 4.28, page 349). The students in the experimental group have indicated 50% of inappropriate use which is lower than that of the control group (i.e. 87.5%) which means that the treatment has given a positive effect to the experimental group. The inappropriate uses occurred when the students used these quantifiers to quantify inappropriate noun referents in inappropriate contexts (Table 4.2.1.17.1).

Table 4.2.1.17.1: Inappropriate Use of ‘another’, ‘enough’ and ‘twice’

Quantifiers (i.e. ‘another’, ‘enough’ and ‘twice’)	Inappropriate Use				Plausible Use (in context)
	Singular Referent	Mass Referent	Plural Referent	Inappropriate context	
enough	thing	-	-	-	enough things
another	-	-	people	-	another person
	-	-	tourists	-	another tourist
	-	-	activities	-	another activity
twice	-	-	-	death	twice the number of deaths
	-	-	-	disease	twice the number of diseases

4.2.3 Inferential Analysis

There were two tests performed to see if there is any statistically significant development in the students’ writings in both groups after a 10 hour treatment. The paired samples t-test was employed to identify if there is any significant mean difference within the groups (i.e. scores from pre-test and post-test were compared) and the scores between the experimental and control group were then compared through the independent samples t-test to see if there is any statistically significant mean difference between these two groups in generating the noun phrases in their writings.

4.2.3.1 The Paired Samples t-test: Mean difference between the English Pre-test and Post-test and BM Pre-test and Post-test for the Experimental Group (Score 1)

The paired samples t-test was employed to the students' achievement in the experimental group before and after treatment to see if there was any significant mean difference in the scores. The results indicate that there was a statistically significant mean difference in the scores $\{t = (38) = -4.55, p < .05\}$ between pre-test ($M = 54.32, SD = 16.86$) and post-test ($M = 65.15, SD = 14.01$) for the experimental group (see Appendix, Table 4.1, page 351). As there was a significant development in the students' writing skills from the pre-test to post-test, this result reveals that the semantic-based explicit contrastive grammar instruction does yield a positive achievement among the students in the experimental group in producing English noun phrases. Likewise, the results of the BM pre-test and post-test indicate a statistically significant mean difference in the scores $\{t = (38) = -3.48, p < .05\}$ between pre-test ($M = 90.38, SD = 6.57$) and post-test ($M = 94.48, SD = 3.85$) (see Appendix, Table 4.3, page 351). This designates that the treatment (i.e. the semantic-based explicit contrastive grammar instruction) provided for the experimental group was not only helpful in developing the students' writing skills in English but also in producing determiners in BM noun phrases.

4.2.3.2 The Paired Samples t-test: Mean difference between the English Pre-test and Post-test and BM Pre-test and Post-test for the Control Group (Score 1)

The paired samples t-test was employed to the students' achievement in the control group before and after treatment to see if there was any significant mean difference in the scores. The results show that there was no statistically significant mean difference in the scores $\{t = (36) = -.66, p < .05\}$ between pre-test ($M = 48.91, SD = 20.66$) and post-test ($M = 50.93, SD = 15.99$) for the control group (see Appendix,

Table 4.2, page 351). Unlike the experimental group, the control group did not perform significantly from the pre-test to post-test. This result further supports the findings of the experimental group which denote that the treatment provided managed to develop the students' writing skills in producing determiners in English noun phrases as compared to the students in the control group who did not receive any treatment but followed the regular English course. Besides, for BM pre-test and post-test, there was a statistically significant mean difference in the scores $\{t = (36) = -2.22, p < .05\}$ between pre-test ($M = 89.89, SD = 7.75$) and post-test ($M = 92.91, SD = 6.06$) (see Appendix, Table 4.4, page 352). The students in the control group albeit did not receive any treatment, improved in their scores significantly from the pre-test to post-test. These findings are important to be highlighted as this leads to an assumption that perhaps the semantic-based explicit contrastive grammar instruction (i.e. treatment) is not the variable which causes the development in the students' BM writing skills in the experimental group but other factors.

Nevertheless, it is crucial to be seen in terms of another perspective where generally, most of the students in the control group were tactful in writing the post-test essays compared to the pre-test as the number of demonstratives and quantifiers utilized in their essays were rather limited. Based on the first method of scoring procedure (i.e. score 1), the number of appropriate use of determiners was divided upon the total number of occurrences in an individual student's essay. As such, when the number of determiners used is limited, the chances of appropriate (i.e. correct) use of these words in producing the BM noun phrases are more likely to occur as compared to an extensive use. This could also be another possible reason for the control group to achieve significant scores from pre-test to post-test.

4.2.3.3 The Independent Samples t-test: Mean difference between the Experimental and Control Group for English Post-test and BM Post-test (Score 1)

The independent samples t-test was performed on the students' achievement between the experimental group and control group after treatment to see if there was any significant mean difference in the scores. The results show that there was a statistically significant mean difference in the scores $\{t = (74) = 4.13, p < .05\}$ between experimental group ($M = 65.15, SD = 14.01$) and control group ($M = 50.93, SD = 15.99$) (see Appendix, Table 4.5, page 352). The students in the experimental group did not only improve significantly in their scores between the pre-test and post-test (see Table 4.1) but also improved significantly better than the scores achieved by the students in the control group. These findings unswervingly reject the null hypothesis which claims that there is no statistically significant mean difference in producing determiners in English noun phrases between the experimental group (which received the semantic-based explicit contrastive grammar instruction of the use of determiners, i.e., demonstratives and quantifiers) and control group (which received no treatment) and subsequently accept the alternative hypothesis which claims that there is a statistically significant mean difference in producing determiners in English noun phrases between the experimental group (which received the semantic-based explicit contrastive grammar instruction of the use of determiners, i.e., demonstratives and quantifiers) and control group (which received no treatment).

On the other hand, for BM, the results indicate that there was no statistically significant mean difference in the scores $\{t = (60.5) = 1.33, p < .05\}$ between experimental group ($M = 94.48, SD = 3.85$) and control group ($M = 92.91, SD = 6.06$) (see Appendix, Table 4.6, page 352). Although the students in the experimental group have improved in their scores from pre-test to post-test (see Table 4.3), there was no

significant difference identified from the scores obtained between the experimental and control group. One of the reasons is perhaps because the control group too improved significantly better from the pre-test to post-test (see Table 4.4) without any treatment. Thus, it is concluded that the treatment (i.e. the semantic-based explicit contrastive grammar instruction) does not really help to develop the students' writing skills in producing determiners in BM noun phrases.

4.2.3.4 The Paired Samples t-test: Mean difference between the English Pre-test and Post-test and BM Pre-test and Post-test for the Experimental Group (Score 2)

The paired samples t-test was employed to the students' achievement in the experimental group before and after treatment to see if there was any significant mean difference in the scores (i.e. score 2). There was a statistically significant mean difference in the scores $\{t = (38) = -4.66, p < .05\}$ between pre-test ($M = 30.97, SD = 15.76$) and post-test ($M = 46.41, SD = 23.01$) (see Appendix, Table 4.7, page 353). As there was a significant development in the students' writing skills from the pre-test to post-test, the result obtained through the second method of scoring (i.e. score 2) too inevitably shows that the semantic-based explicit contrastive grammar instruction has developed the students' scores in the experimental group in producing English noun phrases (see Table 4.1 for a comparison with score 1). The students' achievement for BM pre-test and post-test highlights that there was a statistically significant mean difference in the scores $\{t = (38) = -4.97, p < .05\}$ between pre-test ($M = 76.92, SD = 22.55$) and post-test ($M = 92.07, SD = 13.60$) for the experimental group (see Appendix, Table 4.9, page 353). The results identified through score 2 too indicates that the treatment (i.e. the semantic-based explicit contrastive grammar instruction) provided for the experimental group was not only helpful in developing the students' writing skills in

English but also in producing determiners in BM noun phrases (see Table 4.3 for a comparison with score 1).

4.2.3.5 The Paired Samples t-test: Mean difference between the English Pre-test and Post-test and BM Pre-test and Post-test for the Control Group (Score 2)

The paired samples t-test was employed to the students' achievement in the control group before and after treatment to see if there was any significant mean difference in the scores (i.e. score 2). The results show that there was a statistically significant mean difference in the scores $\{t = (36) = -3.99, p < .05\}$ between pre-test ($M = 24.40, SD = 14.87$) and post-test ($M = 33.72, SD = 15.66$) (see Appendix, Table 4.8, page 353). Unlike the students' achievement in score 1 (see Table 4.2), based on the second method of scoring (i.e. score 2), the control group performed significantly better from the pre-test to post-test. One of the reasons for this circumstance to occur is perhaps due to the length of the essays produced by the majority of the students in the control group for the post-test which is rather long (i.e. more than 350 words) as compared to that of their pre-tests and the post-tests of the experimental group. Hence, the chances for these students to include more demonstratives and quantifiers in their lengthy essays are more likely to occur. As the number of demonstratives and quantifiers to be used are predetermined in the second method of scoring (unlike score 1 where the number of appropriate use is divided upon the total number of demonstrative and quantifier occurrences in an individual student's essay), there is a greater tendency for a lengthy essay to gain at least slightly higher scores which subsequently leads to a significant achievement from the pre-test to post-test in the control group.

As for BM, there was no statistically significant mean difference in the scores $\{t = (36) = -1.09, p < .05\}$ between pre-test ($M = 88.02, SD = 16.71$) and post-test ($M = 91.22, SD = 13.48$) (see Appendix, Table 4.10, page 354). Unlike the first method of

scoring (i.e. score 1) (see Table 4.4), in score 2, the students of the control group did not achieve significant results from the pre-test to post-test. This result leads to a generalisation that perhaps the students in the control group did not perform significantly better in the BM post-test compared to pre-test as they did not receive the semantic-based explicit contrastive grammar instruction.

4.2.3.6 The Independent Samples t-test: Mean difference between the Experimental and Control Group for English Post-test and BM Post-test (Score 2)

The independent samples t-test was performed on the students' achievement between the experimental group and control group after treatment to see if there was any significant mean difference in the scores. The results indicate that there was a statistically significant mean difference in the scores $\{t = (67.23) = 2.82, p < .05\}$ between experimental group ($M = 46.41, SD = 23.01$) and control group ($M = 33.72, SD = 15.66$) (see Appendix, Table 4.11, page 354). The students in the experimental group did not only improve significantly in their scores between the pre-test and post-test (see Table 4.2.3.7) but also improved significantly better than the scores achieved by the students in the control group. These findings promptly reject the null hypothesis which claims that there is no statistically significant mean difference in producing determiners in English noun phrases between the experimental group (which received the semantic-based explicit contrastive grammar instruction of the use of determiners, i.e., demonstratives and quantifiers) and control group (which received no treatment) and subsequently accept the alternative hypothesis which claims that there is a statistically significant mean difference in producing determiners in English noun phrases between the experimental group (which received the semantic-based explicit contrastive grammar instruction of the use of determiners, i.e., demonstratives and quantifiers) and control group (which received no treatment).

The results for BM indicate that there was no statistically significant mean difference in the scores $\{t = (74) = .27, p < .05\}$ between experimental group (M = 92.07, SD = 13.60) and control group (M = 91.22, SD = 13.48) (see Appendix, Table 4.12, page 354). Although the students in the experimental group have improved in their scores from pre-test to post-test (see Table 4.9), there was no significant difference identified from the scores obtained between the experimental and control group. One of the reasons is perhaps because the control group too improved significantly better from the pre-test to post-test (see Table 4.8) even without receiving any treatment. Thus, it is concluded that the treatment (i.e. the semantic-based explicit contrastive grammar instruction) does not really help to develop the students' writing skills in producing determiners in BM noun phrases.

4.2.3.7 The Independent Samples t-test: Mean difference between the

Experimental and Control Group for English Mid-test and BM Mid-test

The results of making an independent samples t-test show that there was no statistically significant mean difference in the scores $\{t = (74) = 1.21, p < .05\}$ between experimental group (M = 72.67, SD = 9.28) and control group (M = 70.22, SD = 8.24) for English mid-test (see Appendix, Table 4.13, page 355). For BM, the results disclose that there was a statistically significant mean difference in the scores $\{t = (74) = 2.13, p < .05\}$ between experimental group (M = 93.08, SD = 3.74) and control group (M = 91.01, SD = 4.69) for BM mid-test (see Appendix, Table 4.14, page 355). As discussed in Chapter III (see section 3.1, page 61), the aim of the mid-test which was given to the students in the middle of the treatment process was not to see the effectiveness of the treatment but as a diagnostic test to figure out the most confusing pairs of demonstratives and quantifiers in English and BM. Hence, the results obtained which do not show any significant achievement of the students in the experimental group compared to that of the control group, do not signify the ineffectiveness of the treatment

for English as the items were tested discretely (i.e. objective items). Likewise, the results which denote a significant improvement of the students' scores in the experimental group over the control group in BM mid-test do not lead to a conclusion that the treatment is effective (especially in learning BM determiners) as the items were tested discretely too (i.e. objective items).

4.2.4 Students' Responses towards the Inappropriate Uses

The analysis of inappropriate use of the demonstratives and quantifiers performed to the students' writings reveals the use of articles (i.e. 'a', 'an' and 'the') by most of the students to begin an English noun phrase without any necessity. There were many instances of this kind encountered in the students' writings and hence, a few to be mentioned are 'the those junction', 'a those house', 'a several minutes', 'a two village', 'a much friend', 'a plenty of choice', 'a many attractions', 'a enough tools', 'a more information', 'a hundreds of cow', 'an another people', 'the another car', 'a lots of food', 'a some decision', 'a twice buildings', 'a various place', 'a various things', 'a both of them', 'a fewer of things', 'a fewest minutes', 'an this zoo', 'an one hour', 'a all of them', 'the some parts', 'an a half hour', 'a neither advantages', 'a every years', 'a this final examination', 'a very fewer time', 'a an abundance of rose flower', 'a thousands of people', 'a any idea' and 'a less price'.

As such, it seemed to be worthy for the researcher to explore further, the reason(s) for these occurrences to be accepted in the students' linguistic repertoire as appropriate use when producing the English noun phrases. Hence, through the questionnaires which were distributed to find out the students' view over these occurrences, it was identified that most of the students felt that the non-existence of articles (i.e. 'a', 'an' and 'the') to begin the English noun phrases was perceived as imperfect. These students opined that the appropriate use of the articles in English is

still vague (which means that these students do not know when or when not to apply the articles) despite several years of English formal lessons in the classroom. In addition, the insertion of articles was also found to be necessary as the students believed that these articles turn the sentences to appear more interesting or appropriate. The inclusion of articles to begin a noun phrase in English suggest that the students have at least understood the concept where an English noun phrase begins with a determiner but these students failed to realise the types of determiners in English where not only articles (which is also inclusive of zero articles), but demonstratives and quantifiers are also included in the list.

Another pattern of the students' English writings which needs to be highlighted is perhaps the influence of the native language (i.e. BM) in the students' way of composing or constructing the English noun phrases. Some of the expressions which deemed necessary to be pointed out are 'many *kuih-muih*' (tr. many cookies / delicacies), 'some *buluh*' (tr. some bamboos), 'all the time table trip' (tr. all the trip timetable), 'two those people' (tr. those two people), 'some biscuit *raya*' (tr. some Raya biscuits), 'one *baju raya*' (tr. one / a Raya dress), 'a lot of Muslim person' (tr. a lot of Muslims), 'one *sijil*' (tr. one / a certificate), 'a piece of *selendang*' (tr. a shawl), 'this *pulau*' (tr. this island), 'a great number of *penduduk kampung*' (tr. a great number of villagers), 'so much of *kelip-kelip*' (tr. an abundance of fireflies), 'one *van forensik*' (tr. one / a forensic van), 'a lot of member parties' (tr. a lot of party members), 'half the money salary' (tr. half the salary), 'more *kesedaran*' (tr. more awareness) and 'some *jamuan*' (tr. some feast).

The students agreed that, undoubtedly, the limited choice of vocabulary in English is the root cause for such instances to occur. As for that reason, there was no other choice for the students but to resort to their L1 (BM) to help them to compose in English. Most of the students believed that their knowledge of BM helped them to

produce English writing especially when they were lack of idea to elaborate on the content. These students perceived their L1 as a ‘saviour’ which helps them to express their idea than an ‘intruder’ which delimits their performance (Kobayashi & Rinnert, 2008; Nambiar, 2009; Nation, 2003; Paramasivam, 2009; Sabourin & Stowe, 2008; Uysal, 2008; Wang, 2003; Woodall, 2002). Besides, some of the expressions such as ‘*baju raya*’ and ‘*kuih-muih*’ were found relevant as there is no definite substitute in the L2 (English) as these expressions reflect their culture.

The findings obtained for the BM writings although denoted no difference in the performance of the experimental and control group, which leads to an assumption that the students did not face much problem when writing in the native language, there were some inappropriate uses identified in their writings which demanded explanation. Most of the inappropriate uses traced in the students’ BM writings were due to reduplication of the noun referents despite the occurrence of the quantifiers which indicate ‘MORE THAN ONE’ entity as in ‘*banyak aktiviti-aktiviti*’, (tr. many activities), ‘*banyak kedai-kedai*’ (tr. many shops), ‘*banyak buah-buahan*’ (tr. many fruits), ‘*sekalian gadis-gadis*’ (tr. all maidens), ‘*seluruh rakan-rakan*’ (tr. all friends), ‘*semua jiran-jiran*’ (tr. all neighbours), ‘*beberapa barang-barang*’ (tr. several things), ‘*semua jenis kuih-muih*’ (tr. all types of cookies), ‘*ribuan mayat-mayat*’ (tr. thousands of corpses), ‘*semua sayur-sayuran*’ (tr. all vegetables), ‘*pelbagai barang-barang*’ (tr. various things) and ‘*ramai rakan-rakan*’ (tr. many friends).

Based on the Entity Number System analysis, it was found that all the noun referents in BM signify the meaning of ‘ONE’ despite the occurrence of the quantifiers which indicate the meaning of ‘MORE THAN ONE’ (refer to qualitative analysis). Hence, the instances above suggest that the students also encountered problems in understanding the concept of quantifiers in BM. These students expressed that sometimes the reduplication of the noun head is believed to be necessary to pose

emphasis on the indicators of large entity (i.e. to show that the noun referent is ‘really many’). Besides, these students also admitted that the existence of certain words in BM such as ‘*gula-gula*’ (tr. sweets), ‘*kanak-kanak*’ (tr. child), ‘*layang-layang*’ (tr. kite) and ‘*rama-rama*’ (tr. butterfly) which are allowed to be used with indicators of large entity to indicate ‘MORE THAN ONE’ as in ‘*banyak gula-gula*’ (tr. many sweets), ‘*ramai kanak-kanak*’ (tr. many children), ‘*beberapa layang-layang*’ (tr. several kites), ‘*semua rama-rama*’ (tr. all butterflies), seems to be perplexing. However, according to Sew (2007:23) these words are not reduplicated nouns which indicate plurality but they are “idiomatic lexicalisation” which signify the meaning of ‘ONE’, hence the students need to be tactful when using the quantifiers for words which are not subsumed under this category.

These findings suggest that the demonstratives and quantifiers are not the only challenging grammatical categories that need to be given attention when producing the appropriate English noun phrases. The appropriate use of articles is equally essential for the students to be exposed to in order to produce appropriate English noun phrases as a noun phrase is made up of determiners (i.e. articles, demonstratives, quantifiers and possessives) as the pre-modifier and a noun head.

4.2.5 Discussion

Overall, it was found that the students’ scores (i.e. score 1 and score 2) have improved within the experimental group (i.e. pre-test to post-test) and in between the groups (i.e. experimental and control) in producing determiners in English noun phrases. Hence, for the second Research Question (i.e. RQ 2), the null hypothesis which claims that there is no statistically significant mean difference in producing determiners in English noun phrases between the experimental group (which received the semantic-based explicit contrastive grammar instruction of the use of determiners, i.e.,

demonstratives and quantifiers) and control group (which received no treatment) is rejected. Consequently, the alternative hypothesis is accepted where there is a statistically significant mean difference in producing determiners in English noun phrases between the experimental group (which received the semantic-based explicit contrastive grammar instruction of the use of determiners, i.e., demonstratives and quantifiers) and control group (which received no treatment). These findings are similar to the findings of several experimental studies conducted in the past which suggest that the use of explicit contrastive grammar instruction although perceived as conventional, this method of input delivery to certain extent is useful in developing the students' writing skills in their second language (Brooks-Lewis, 2009; Chen, 2006; Ghabanchi & Vosooghi, 2006; Govindasamy, 1994; Laufer & Girsai, 2008; Rianto 1999; Tan, 2001; Widdowson, 2003).

It was not one of the aims of this study to see if there is any statistically significant mean difference in the scores produced by the students for the BM post-test after the treatment (i.e. within the groups and intergroup). Nevertheless, the descriptive and inferential analyses were performed to the scores achieved by the students in both groups for the BM pre-test and post-test. In these, incidental yet significant findings of the BM post-test, the results obtained are rather inconsistent which subsequently indicate that the semantic-based explicit contrastive grammar instruction does not really affect the result of the BM post-test.

Although the results suggest that there is a significant improvement in the scores achieved by the students in the experimental group between the pre-test and post-test in both scores (i.e. score 1 and score 2), no significant difference was found between the scores of the experimental and control group. One of the possible reasons for such results to occur over the students' achievement for the BM writings is perhaps due to the fact that it is the native language of the students (i.e. Malay students) who

participated as the samples of the study and hence, much difficulty was not encountered by these students in understanding and using the language compared to the second language (i.e. English). As such, the treatment perhaps did not yield any significant impact to their performance. Another reason could be that from the part of the researcher who did not emphasise the BM determiners in isolation (i.e. no special attention) but used these determiners as contrastive treatment to develop the students' use of English determiners that simultaneously corresponds to the objective of this study.

The analyses of individual items which signify the percentage of inappropriate use of each demonstrative and quantifier illustrated that the uses of the demonstratives (i.e. 'this' and 'that'), partitives and classifiers (i.e. 'a piece of', 'a slice of', '*sehelai*', '*sebihi*', '*seorang*', and '*sebuah*'), indicators of large entity (i.e. 'thousands of', 'many', 'a large number of', 'a large amount of', 'a great number of', 'the majority of', 'an abundance of', 'plenty of', 'a lot of', 'lots of', 'much', 'more', 'most', '*ratusan*', '*ribuan*', '*beribu-ribu*', '*banyak*', '*para*' and '*ramai*'), indicators of small entity (i.e. 'a little', 'less', 'some', 'a couple of', 'a number of' and '*sedikit*'), cardinal numbers (i.e. 'one', 'two', '*satu / se*' and '*sepuluh ribu*'), indicators of fractions (i.e. '*dua pertiga*', '*setengah*' and '*separuh*'), indicators of individual entity (i.e. 'every', '*setiap*' and '*tiap-tiap*'), indicators of the whole entity (i.e. 'all', 'both', '*semua*', '*segala*', '*sekalian*', '*seluruh*' and '*kedua-dua*') and indicator of optional / zero entity (i.e. 'any') have revealed better performance as there was a decrease in the percentage of inappropriate use from pre-test to post-test for each of these items.

These findings although serve as supplementary, the discrete items which have demonstrated development in their use (i.e. the ones which were affected positively by the semantic-based explicit contrastive grammar instruction) were highlighted to substantiate the results of the inferential analysis which indicated significant mean

difference within the experimental group and in between the groups (i.e. experimental and control). Through this individual item analysis, it was found that the students' use of 28 items (out of 47, excluding 'various' and 'numerous') have indicated improvement in the experimental group from pre-test to post-test. For BM, 23 items (out of 38, excluding '*pelbagai*' and '*masing-masing*') have designated some development from pre-test to post-test. The control group's achievement is as equal as the experimental group which also indicated some development in the use of 28 items (English) and 25 items (BM) from pre-test to post-test. These findings albeit may refute the effectiveness of the treatment (for the English determiners), the percentages of inappropriate use which indicate a decrease from pre-test to post-test for these items in the control group were generally slight than that of the experimental group which yield to a significant mean difference (see Appendix, Table 4.5, page 352 and Table 4.11, page 354).

Besides, 'least' was identified as the most challenging for the students in both groups as there was no occurrence of this item traced in any of the students' writings. Unexpectedly, the students in the experimental group too did not make any attempt to use this indicator of small entity in the post-test despite the treatment. Moreover, the results of the discrete item test (i.e. mid-test) also indicate the quantifier pair "less / least' as the most confusing quantifier pair for the students in both groups. As mentioned earlier (see section 4.1.2.2.3(a), page 118), 'less' and 'least' are the comparative and superlative form of 'a little' which designate the degree of the amount of the noun referent (i.e. smaller than usual) where the invariant meaning of 'less' and 'least' is postulated as 'indefinite smaller amount of uncountable noun; lesser than usual' and 'almost none of the uncountable noun' respectively. Despite the treatment, the students' inability to include 'least' in their essays suggests that these students perhaps perceived the meaning of 'less' and 'least' as more or less similar without

realising that the marked semantic properties of these items are only recognisable through the context of their occurrence.

For BM, all the demonstratives and quantifiers were utilised by the experimental and control group in their writings. These students did not find any difficulties in using the classifier (i.e. '*seekor*') and cardinal number (i.e. '*sejuta*') as there was no inappropriate use identified for these items in both tests. The zero percentage of inappropriate use identified for these items in both tests. The zero percentage of inappropriate use for '*seekor*' is expected as the function of this classifier is well understood (i.e. to quantify only animal noun referents). On the other hand, the 100% of appropriate use for '*sejuta*' occurred as it was used by the students in appropriate contexts as compared to other cardinal numbers. The demonstratives (i.e. '*itu*' and '*ini*') in BM were identified as the least problematic in the students' writings. This is perhaps due to their functions to post-modify both singular and plural noun referents unlike the use of English demonstratives (i.e. 'this', 'that', 'these' and 'those') which depends on the semantic properties of the noun referent either 'ONE' or 'MORE THAN ONE'.

In conclusion, this study has shown that the semantic-based explicit contrastive grammar instruction is undeniably effective in developing the students' use of demonstratives and quantifiers when producing the English noun phrases. As such, the idea of embracing this method into the regular grammar lessons in the classroom (especially in the teaching of demonstratives and quantifiers) needs to be welcomed as it introduces the function (i.e. meaning and its use) of the grammatical categories in English and BM in context but not in isolation which later yields to a fruitful performance.