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**CITATION USES AND PERCEPTIONS IN THE LITERATURE  
REVIEW OF PHD THESES BY EFL ARAB POSTGRADUATES**



**DOCTOR OF PHILOSOPHY  
UNIVERSITI UTARA MALAYSIA  
2017**



Awang Had Salleh  
Graduate School  
of Arts And Sciences

Universiti Utara Malaysia

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## Abstrak

Sitasi dalam penulisan akademik adalah penting tetapi mencabar untuk penulis baru. Meski pun banyak kajian telah diusahakan tentang penggunaan sitasi, namun kurang kajian menyentuh penggunaan sitasi dalam kalangan pelajar pascasiswazah Arab yang mempelajari bahasa Inggeris sebagai bahasa asing (EFL). Oleh hal yang demikian, kajian ini bertujuan mengenal pasti penggunaan sitasi dan meneroka persepsi pelajar pascasiswazah EFL Arab dan penyelia tesis PhD tentang penggunaan sitasi. Kajian kualitatif ini meneliti 20 bab ulasan karya daripada tesis PhD yang dihasilkan oleh pelajar pascasiswazah EFL Arab dalam bidang Teknologi Maklumat dan Linguistik Terapan. Pendekatan tatabahasa sistemik fungsional Halliday telah digunakan untuk menganalisis penggunaan sitasi. Ciri-ciri linguistik yang diperoleh daripada analisis kata dan tatabahasa telah diupayakan dalam penilaian penggunaan sitasi. Sembilan orang pelajar pascasiswazah EFL Arab dan lima orang penyelia PhD dari bidang Linguistik Terapan dan Teknologi Informasi telah ditemu bual untuk mengenengahkan cabaran penggunaan sitasi. Dapatan menunjukkan klausa deklaratif penuh digunakan dalam sitasi. Proses material, relational, verbal, mental, existential, dan behavioural digunakan untuk memperlihatkan Sistem Transitivity. Klausa yang kompleks dalam sitasi dihubungkan secara hipotaktikal dan parataktikal untuk merealisasikan unjuran, penambahan, dan kombinasi kedua-duanya sebagai satu bentuk hubungan logik-semantik. Tema teks, interpersonal, bertopik, berpredikat dan bertanda diguna pakai dalam klausa sitasi dengan pelbagai kekerapan. Penilaian mendedahkan terdapat dua penggunaan klausa dalam sitasi, iaitu penggunaan yang sesuai dan tidak sesuai. Temu bual dengan pelajar pascasiswazah EFL Arab memaparkan bahawa antara cabaran dalam penggunaan sitasi, termasuklah menentukan pendirian, mempunyai pengetahuan yang terbatas dalam penggunaan sitasi, dan mengolah semula. Temu bual dengan penyelia juga menunjukkan masalah yang dialami oleh pelajar pascasiswazah EFL Arab disebabkan oleh kurang pembacaan mendalam, ketidakupayaan untuk menggunakan sitasi, kurang kemahiran penulisan akademik dalam bahasa kedua, dan ketidaksesuaian penetapan pendirian penulis. Dapatan kajian ini melanjutkan pengetahuan sedia ada tentang pemerihalan linguistik berhubung penggunaan sitasi dan meneroka peluang untuk mengembangkan kursus EAP/ESP.

**Kata kunci:** Penulisan akademik, Sitasi, Ulasan karya, Tatabahasa Sistemik Fungsional

## Abstract

Citation in academic writing is significant but challenging for novice writers. In spite of the increasing studies on the use of citations, limited knowledge is available about the use of citations by EFL Arab postgraduates. Hence, this study aimed at determining the use of citations and exploring the perceptions of EFL Arab postgraduates and PhD supervisors on the use of citations. This qualitative study examined 20 literature reviews from PhD theses in Information Technology and Applied Linguistics produced by EFL Arab postgraduates. The use of citations was analysed using Halliday's Systemic Functional Linguistics. The linguistic features obtained from the lexico-grammatical analysis were employed in the evaluation of the use of citations. Nine EFL Arab postgraduates and five PhD supervisors from Applied Linguistics and Information Technology were interviewed to highlight the challenges encountered in using citations. The findings revealed that full declarative clauses were used in the citations. Material, relational, verbal, mental, existential, and behavioural processes were used to realize the Transitivity System. Clause complexes in citations were joined hypotactically and paratactically to realize Projection, Expansion, and a combination of Projection and Expansion as logico-semantic relations. Textual, Interpersonal, Topical, Predicated, and Marked themes were employed in the clauses of the citations with varied frequencies. The evaluation revealed both appropriate and inappropriate use of clauses in the citations. The interviews with EFL Arab postgraduates revealed the challenges encountered in using citations such as adopting a stance, having insufficient knowledge in using citations, and paraphrasing. The interviews with PhD supervisors also showed that difficulties faced by EFL Arab postgraduates are due to lack of in-depth reading, inability to use citations, poor L2 academic writing skills, and improper positioning of writers' stance. The findings of this study, firstly, extended the existing knowledge of linguistic description on the use of citations and, secondly, explored opportunities to develop EAP/ESP courses.

**Keywords:** Academic writing, Citations, Literature review, Systemic Functional Linguistics (SFL)

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## **List of Abbreviations**

AWL	Academic Word List
AL	Applied Linguistics
AHSGS	Awang Had Salleh Graduate School
CAQDAS	Computer Assisted Qualitative Data Analysis
CARS	Create a Research Space
CDA	Critical Discourse Analysis
DBIs	Discourse-Based Interviews
EFL	English Foreign Language
ESL	English Second Language
EFLs	English Foreign Learners
ELPT	English Language Proficiency Test
ESP	English for Specific Purposes
EPC	English for Professional Communication
FLLs	Foreign Language Learners
FL	Foreign Language
GSU	Graduate Studies Unit
IELTS	International English Language Testing System
IT	Information Technology
L2	Second Language
PhD	Doctor of Philosophy
RAs	Research Articles
SLLs	Second Language Learners
SL	Second Language
SFL	Systemic Functional Linguistics
TBIs	Text-Based Interviews
TOEFL	Test of English as a Foreign Language
UUM	Universiti Utara Malaysia
UK	United Kingdom
UKM	Universiti Kebangsaan Malaysia
USA	United States of America

# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

The great significance of students' academic writing has attracted the attention of the higher education (Coffin, *et al.*, 2003; Arkouids and Tran, 2010) since academic writing is a central productive skill that is strongly associated with academic success (Manjet, 2016). If a student has problems in writing, it will likely result in failure, and such problems are not easily clarified (Lillis and Scott, 2007). What distinguishes academic writing from other kinds of genre is the high degree of formality; academic writers are required to write appropriately and correctly, using technical vocabulary, complex sentences, and a less use of the personal voice (Coffin *et al.*, 2003; Swales and Feak, 2012). This formality is considered the most intimidating and challenging issue (Hyland, 2006) because a formal research report with complex data and ideas would not be accepted academically for publication since it could be regarded as too simplistic when written in non-academic or conversational English (Swales and Feak, 2012).

In writing academic articles, academic reports, dissertations or PhD theses, students should build their studies on other researchers' studies and findings. Therefore, citations constitute a part and parcel of academic writing because the credibility and reliability of the information presented by a writer depends to a large extent on the previous studies. This implies that building one's studies is achieved through other previous studies (Feak and Swales, 2009; Hyland, 2009a; Petric and Harwood, 2013; Samraj, 2013) by means of citations which can be employed in different forms

and used for different functions and purposes (Swales, 1990, 2014; Thompson and Tribble, 2001; Thompson, 2001, 2002).

## **1.2 Rationale of the Study**

Despite the several studies that examined citations (Swales, 1990, 2014; Thompson, 2001, 2002; Hyland, 1999; Mansourizadeh and Ahmad, 2011; Yang, 2013), limited studies have presented comprehensive descriptions of citations use. Consequently, suggestions were introduced to examine citations use employing the Functional theory (Hu and Wang, 2014) and exploring the citation use through interviews (Kwan and Chan, 2014; Petric` and Harwood, 2013). According to Halliday (1985) and Halliday and Martin (1993), a linguistic text can reveal three kinds of meanings simultaneously. These involve ideational, interpersonal and textual meanings. Ideational (experiential) meanings refer to the real world and actions that take place in reality. Interpersonal meanings express the writer's (role) relationship with the reader (listener) and the writer's stance towards the subject matter. As for the textual meanings, they refer to the way the text is organized as a piece of writing to express both ideational (experiential) and interpersonal meanings. Each one of these meanings is associated with a register variable that can affect the use of language, including field, tenor, and mode. For example, ideational (experiential) meanings are associated with field. That is to say, each field depends on certain types of processes. The interpersonal meanings are associated with the tenor, whereas the textual meanings are associated with mode. By applying these three language metafunctions (Interpersonal, Ideational, and Textual), the analyses of the clauses used in citations could present more in-depth details of using citations since each metafunction addresses a certain aspect that was not fully described in previous studies.

Though these types of meanings probably present extensive discussions of the use of citations, conducting interviews with students could highlight what makes citations challenging for novice writers, specifically EFL Arab postgraduates. Besides the researcher's personal experience in using citations when writing assignments during Master's study, the several informal discussions with students from different countries and ethnic backgrounds at Univesiti Utara Malaysia (UUM) showed that students have little information about how to use citations academically. These aspects motivated the researcher in the present study to identify the use of citations and explore the challenges of using citations among EFL Arab students studying in Malaysia.

### **1.3 Background of the Study**

The increasing expansion in the number of students studying abroad implies the diversity of students attending the universities, including ethnicity and age (Coffin, *et al.*, 2003; Hyland, 2006). The diversity of cultural and social backgrounds, the students' academic needs and the linguistic diversities in student body of non-native speakers of English entail students' varieties in their identities, understanding and learning (Lillis, 2001; Coffin, *et al.*, 2003). Consequently, this casts more responsibility on the shoulder of the university academic staff and represents significant challenges to them due to several reasons. Among them is that the concept of academic language is unfamiliar to the non-native speakers of English (Manjet, 2016) during the high school period (Hyland, 2006) and students' interpretation and understanding of issues will be different (Coffin, *et al.*, 2003).

Hence, universities require staff with specific training and skills to cope with students' needs, particularly students' writing in English, which has become the international language of research (Bruce, 2008). In addition, publishing in English has increased worldwide recently (Ferguson, Pérez-Illantada, and Plo, 2011). Publishing in English includes not only countries with English as the official language or the first language but also those with English as the Second Language (ESL) or English as the Foreign Language (EFL), either as a personal choice or as a necessity (Tang, 2012). Thus, it can be said that these kinds of developments represent rational reasons to unpack the academic discourse (Hyland, 2011).

In Malaysia, it is noticeable that the number of international students is increasing (Manjet, 2016). In a recent news article, entitled 'Malaysia ranked world's 9<sup>th</sup> for international students,' published by BORNEO POST online on February 15, 2015 ([www.theborneopost.com](http://www.theborneopost.com)), it was declared that the educational system in Malaysia is similar in quality with other developed countries. Thus, 135,000 foreign international students placed Malaysia in the rank of number nine as a choice to complete their studies. Besides quality of education, the low cost of fees and cost of living constituted other factors for the increasing number of international students in Malaysia.

There may be other factors that have led these students to choose Malaysia to complete their higher studies, including the attitude adopted by people and policy of the Western countries toward people from the Middle East countries, especially Arab countries after the Attack of the September, 11<sup>th</sup>, 2001. The war conflict and the unstable political conditions in some Arab countries, such as Palestine, Iraq, Libya,

Yemen, and Syria formed another reason for the increasing number of the international students in Malaysia (Zeeshan, Sabbar, Bashir, and Hussain, 2013).

Similar to the native speaking countries, such as USA, UK, Canada, New Zealand and Australia, getting the admission to the Malaysian universities requires IELTS band 6 or TOEFL 550 for Paper Based Test and 80 for Internet Based Test. The international students who do not obtain IELTS or TOEFL with the required band and points have another opportunity for joining the Malaysian universities. For example, Universiti Utara Malaysia (UUM) used to give the international student an opportunity to start his/her academic study by admitting him/her to an English Language Proficiency Test (ELPT) before the beginning of study if he/she does not have IELTS or TOEFL. If a student passes the ELPT, he/she will join his/her study directly, but when a student fails, he/she has the opportunity to study an English intensive course for up to two semesters only giving him/her another opportunity by holding another ELPT at the end of the English intensive course. However, UUM changed its policy regarding ELPT. Starting of the academic year 2016/2017, international students from specific countries, such as the Middle East region, who do not have IELTS or TOEFL, have to join the English Intensive Course for one semester and they have to sit for the ELPT at the end of the course.

Malaysia could best suit the interests and goals of the international students from Arab countries. The medium of instruction in these countries depends mostly on Arabic language, whereas English is classified as a Foreign Language (FL) representing only a minor subject that is rarely used in daily communication. Thus, students coming from the Middle East region are English Foreign Learners (EFLs),

and their countries are classified as English Foreign Language (EFL) countries, whereas other international students coming from other countries, such as Pakistan and Nigeria, are classified as Second Language Learners (SLLs).

In the following discussion, there is a demonstration of the classification of countries into three circles, based on the status of English in each country. This classification probably gives us an idea about the background of student writers participating in the present study.

### 1.3.1 Outer Circle and Expanding Circle

The countries in the Outer Circle are multicultural and multilingual. In these countries, English has an official status, particularly in their language policies. Thus, English has a significant role, represented mainly by the social interaction and literary creativity (Kachru and Smith, 2008). On the other hand, the Expanding Circle refers to English-as-a-Foreign-Language variety in countries, such as the Middle East countries, Taiwan, China, Egypt, Turkey, Saudi Arabia, Indonesia, and Japan. In these countries, English does not have an official status, but it is used mainly for international communication, trade and the language of technological, scientific, and academic discourse.

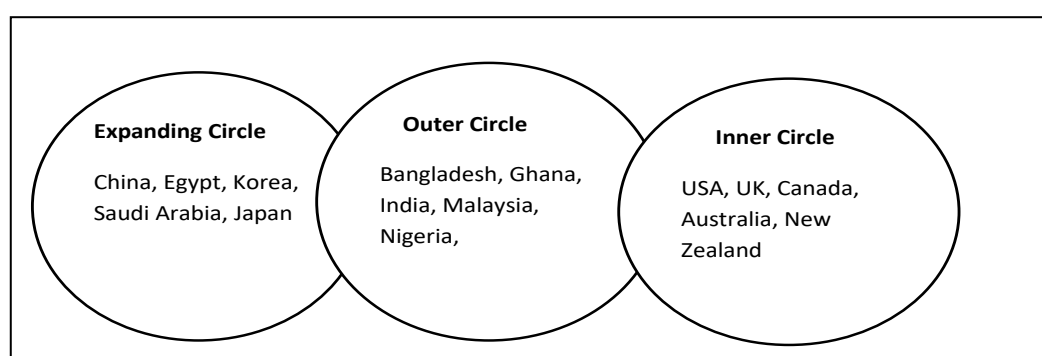


Figure 1.1. Taxonomy for English status worldwide (Adapted from Kachru, 1990)

It can be argued that these three circles could lead to varieties of speech, distinguished cultural pluralism and linguistic diversities, thus resulting in cultural variety and diversity (Kachru, 1990). According to Kachru and Smith (2008), several factors could affect each variety within a particular context and because users of English are of varied backgrounds, they could be challenged in using English. Thus, students' use of language could be influenced by cultural and social factors (Sawaki, 2016). Therefore, studying the language phenomenon has to take into account these factors which are involved in the individuals' linguistic behavior.

Although the present study is not based on the sociolinguistic approach, the possible effect of students' cultural background, including the possible effect of their first language on their writing in English, the status of English in their origin countries, the educational background in their countries, the possible association between students' academic writing challenges and their language proficiency and cultural diversity (Andrade, 2006; Sawir, 2005) have led the researcher in the present study to introduce the classification of countries as it was demonstrated in Figure 1.1 (page 7). Hence, the literature review chapters of the PhD theses that were analysed in the present study were produced by EFL Arab postgraduates. In addition, the (students) participants who were interviewed in the present study belong to the Arab countries which belong to the Expanding Circle.

### **1.3.2 Domains of Knowledge**

Postgraduate students in different universities around the world, including Malaysia, are required to write assignments, project papers, dissertations or PhD theses. However, writing PhD theses is varied based on the language and the discipline used

(Irvin, 2010). For example, PhD theses of arts are based on the strength of the arguments, revealing more personality and subjectivity. Similarly, theses of the social sciences are based on arguments supported by evidence. On the other hand, science-based PhD theses focus less on arguments (Parry, 1998).

The social world is viewed as socially constructed realities; in other words, meaning is a human construction. This implies that the inquiry in soft disciplines involves human behavior, perceptions, subjectivity, actions, thoughts, and feelings (Cohen, Manion, and Morrison, 2007). That is to say, soft disciplines, like Applied Linguistics employed in the present study, are based on re-interpreting the interpretations. Hence, the resulting knowledge is subjectively meaningful, subject to contextual dynamics, and dependent on arguments rather than clear-cut (Becher and Trowler, 2001). Consequently, communicating such knowledge requires explicit interpretations and assumptions as acknowledged aspects of knowledge (Hyland, 2002b). In humanities fields, researchers focus on the originality of wording, believing that language and meaning are inseparable (Bazerman, 1994). In this regard, academic discourse considers human agency as the core of knowledge construction. This suggests the diversity of interpretations, and extends the space for an elaborated dialogue. Consequently, a higher number of citations frequencies coheres very well with such academic discourse.

On the other hand, in hard disciplines, like Information Technology that is also used in the present study, it is assumed that there is one single objective reality. This reality is independent of human subjectivity and is governed by consistent rules of cause/effect relations (Cohen et al., 2007). Hence, the purpose of the scientific

investigation is to comprehend, validate, and display the external world empirically. This inquiry involves basically adopting a rigorous approach inductively and deductively to test systematically particular hypotheses in controlled settings by employing certain procedures and measurements (Becher and Trowler, 2001; Hyland, 1999). In such technical fields, knowledge that is discovered and proved through such systemic and rigorous procedures is viewed as genuine and empirically grounded (Habermas, 1971). By modelling propositions, the human agency in knowledge construction is less emphasized and the area for alternative viewpoints and re-interpretations are not allowed (Charles, 2006b). Hence, members of the science community focus on the originality of the idea, believing that the core of science are facts and theories, not words“ (Bouville, 2008, p. 314).

Writing a PhD thesis is similar to writing an academic article. The difference between a thesis and an academic article is the length of the thesis. Due to these, writers, particularly non-native speakers of English, could face great challenges because of their less practice, insufficient skills in the academic writing (Hartley, 2008), as well as lacking clarity about the conventions of a certain genre (Murray and Moore, 2006). Therefore, analysing discourses represents a strategy to study language in action or examine a text within its social context. Hence, research in the area of academic genres could demonstrate the varied ways and strategies adopted by the writers in different disciplines (Hyland, 2009b; Hyland, 2016). Similar to discourse is the broad term called genre analysis‘ which includes several tools and attitudes of texts based on detailed qualitative analyses of a single text, supported by quantitative counts of language features. These written genres include several items,

among which, for example, are research articles, textbooks and PhD theses, as demonstrated below.

Table 1.1

*Academic Genres*

Written genres	Spoken genres
Research articles/ book reviews	Lectures/student presentations
Text books/PhD dissertations	Seminars/Office hour meetings
Submission letters/reprint request	Tutorials/Conference presentations
Undergraduate essays/Grant proposals	PhD defense/admission interviews
Conference abstracts/editor response letters	Colloquia/peer study groups

(Adapted from Hyland, 2009b)

When analysing texts, knowledge domains of each type of texts should be taken into consideration. The traditional division puts the natural sciences and technology on one side as hard disciplines and humanities on the other side as soft ones, whereas social sciences are in the middle (Coffin, *et al.*, 2003, p.48; Hyland, 2006, 2009b, p.63), as in Table 1.2 below.

Table 1.2

*Continuum of Academic Knowledge*

Sciences	Social Science	Humanities
HARDER		SOFTER
Empirical and objective		Explicitly interpretive
Linear growth of knowledge		Dispersed knowledge
Experimental methods		Discursive argument
Quantitative		Qualitative
More concentrated leadership		More varied audience
Highly structured genres		More fluid discourses

(Adapted from Coffin, et al., 2003)

Science writing is established empirically by indicating a gap, hypothesizing and conducting experiments to get findings that support the hypotheses. On the other hand, humanities disciplines adopt case studies, claims and introspection, and are

based on the strength of the argument; these claims are either rejected or accepted. Between these two domains of knowledge, social sciences adopt methods of sciences, but they give importance to explicit interpretation rather than empirical and objective ones. For example, social sciences interpret the findings subjectively, whereas hard sciences report the findings objectively. In other words, knowledge domains are divided into a hard domain of knowledge and a soft domain of knowledge (Hyland, 2009b). In this regard, Wells (1992) considers that each subject discipline has its own way for judging validity, mode of discourse and forms of arguments.

Writing in these domains requires specific skills because “writing is a skill, and writing from sources is an important sub-skill for academic writers” (Pecorari, 2008, p.2). In writing papers, dissertations or PhD theses, writers have to follow specific steps and include main sections in their writings, such as the title, abstract, introduction, related studies or literature review, methodology, findings and discussions. Though different in size and length, the basic pattern structure of each type of writing is relatively similar, and it is important to refer to other writers’ work and studies when conducting studies (Bailey, 2011) because citation from other sources and the appropriate reference to other texts are basic characteristics of academic writing (Thompson and Tribble, 2001).

The citation from other sources was divided by Swales (1990) into two types: integral and non-integral citation, as presented in Table 1.3.

Table 1.3

*Types and Subcategories of Citations*

Types of Citations	
Integral citation	Non-integral citation
Verb controlling	Source or Attribution
Naming	Identification
Non-citation	Reference
	Origin
Reporting citation	
Non-Reporting citation	
(Adapted from Swales, 1990, 2014; Thompson, 2001, 2002)	

The former type integrates the name of the cited author within the structure of the clause, giving him/her the function of a subject, an agent, an adjunct, or a part of a noun phrase. In this type of citation, the focus is on the actions of the researchers. On the other hand, in the non-integral citation, the name of the cited author occurs in parenthesis or represented by a number. In such a type of citation, the focus is on the research findings of the cited author. Within the integral type of citation, Thompson (2001, 2002) presented other three subcategories, including *Verb controlling*, *Naming* and *Non-citation*. In the *Verb controlling* subcategory, the author functions either as a subject or as an agent. In such a subcategory, the citing writer can use reporting verbs to integrate his/her own words with the cited author's words. In *Naming*, the citation forms a noun phrase, whereas *Non-citation* is used to refer to either *Verb controlling* or *Naming*.

#### 1.4 Statement of the Problem

Academically, citation is the most distinguished feature in using language in disciplines, since citations and referencing to other authors' studies are basic for the

persuasion and the acceptance of the arguments (Thompson and Tribble, 2001; Charles, 2006b; Okamura, 2008; Hyland, 2009a; Shooshtari and Jalilifar, 2010; Hewings, Lillis and Vladimirov, 2010; Monreal and Salom, 2011; Mansourizadeh and Ahmad, 2011; Yang, 2013; Maroko, 2013; Samraj, 2013; Rowley-Jolivet and Carter-Thomas, 2014; Swales, 2014; Nguyen and Pramoolsook, 2015). Hence, citations have attracted much research attention (Hu and Wang, 2014). The significance of citations is also based on their association with the academic success; in other words, the greater use of citations and varying their rhetorical functions and purposes resulted in getting high grades in academic writing (Petric', 2007).

However, factors for variations in citation uses are not known (Swales, 2014). For example, the citation uses could be influenced by the discipline (Hyland, 1999; Thompson and Tribble, 2001; Thompson, 2002; Okamura, 2008; Harwood, 2009; Hyland, 2009a; Shi, 2012; Petric' and Harwood, 2013; Hu and Wang, 2014), language (Monreal and Salom, 2011; Rowley-Jolivet and Carter-Thomas, 2014; Hu and Wang, 2014), the experiences of writers (Mansourizadeh and Ahmad, 2011; Rabab'ah and Al-Marshadi, 2013; Samraj, 2013), as well as genre (Charles, 2006b; Yang, 2013; Samraj, 2013).

Choosing the appropriate reporting verbs in these citations is significantly essential in asserting credible claims of the writer (Thompson and Ye, 1991; Thomas and Hawes, 1994; Hyland, 1999; Bloch, 2009, 2010; Shi, 2012; Yang, 2013; Monreal and Salom, 2011; Nguyen and Pramoolsook, 2015; Yeganeh and Boghayeri, 2015). The writer's stance toward the arguments should be appropriate and of acceptable voice (Hyland, 2008, p.7, 2011, p.9; Bloch, 2010). Thus, using the reporting verbs

appropriately requires a student to understand the subtle difference in their meanings. However, using these reporting verbs represents another challenge (Nguyen and Pramoolsook, 2015; Yeganeh and Boghayeri, 2015) even for learners with advanced English language because they often have difficulty in distinguishing between the implied meanings of these reporting verbs (Bloch, 2009, 2010). Moreover, students are often not sure of the appropriate stance to be adopted toward a citation (Maroko, 2013). Consequently, they use a limited range of reporting words (Parkinson, 2013).

Lack of evaluation when citing information (Petric', 2007; Monreal and Salom, 2011), difficulty, neutrality, and ambiguity in adopting an attitude by the student writer can be attributed to the influence of the writer's native language, its academic culture (Rowley-Jolivet and Carter-Thomas, 2014) and cross-cultural variation (Jalilifar and Dabbi, 2012). Hence, novice writers' dependence on conversational words and 'fancy' verbs in academic writing (Lang, 2004; Monreal and Salom, 2011; Nguyen and Pramoolsook, 2015) reflects a non-academic perspective and might taint a fact or a piece of information with subjectivity (Parkinson, 2013).

Regarding the citations types, the two taxonomies of citations by Swales (1990, 2014) and Thompson and Tribble (2001) which have been adopted by several researchers are insufficient to present a comprehensible description of the citation use. Swales' (1990) taxonomy which classified citations into the integral and the non-integral citation was based on the surface analysis of either integrating the cited author with the structure of the clause or disintegrating the cited author from the structure. The other taxonomy of Swales (2014) classified citations into reporting or non-reporting. This latter classification was based on Hyland's (1999) taxonomy of

the reporting verbs which did not focus on the verb to *be* and other types of verbs. Such classifications also did not consider the types of clauses used in each citation. In addition, research verbs such as *conducted*, *studied*, and *analysed* cannot be used for reporting or quoting (Halliday, 1985; Halliday and Matthiessen, 2014).

Thus, these verbs need further focus to reclassify them based on their functions in the clauses. The other taxonomy by Thompson and Tribble (2001) limited the description of the integral citation to Verb controlling, Naming and Non-citation. Such a taxonomy neglected citations with multiple clauses. Moreover, the study on the role of the cited author that was explored by Hyland (1999) and Swales (2014) included contradictory findings. Contrasts as well as inconsistency in the findings of previous studies occurred in using citation and reporting verbs in the different disciplines. For example, research articles of soft disciplines in Hyland's (1999) findings contained the frequency of reporting verbs as follows: Discourse (61.57%), Research (28.57%), and Cognition (9.85). On the other hand, research articles of hard disciplines in the same study contained the frequency of reporting verbs as follows: Research (50.32%), Discourse (45.2%), and Cognition (4.47%). Contradictory findings were also found within the same genre of the same domain of knowledge (Lang, 2004) and different genres of the same domain (Hyland, 1999; Manan and Noor, 2014). Even though the master dissertations of the Malaysian students in Manan and Noor's (2014) study belong to the soft domain of knowledge, research reporting verbs dominated with 44.8%, followed by cognition reporting verbs with (30.2%), whereas discourse reporting verbs were used less with only (25%).

The contrasts also occurred in the integral type of citation, specifically the choice of Verb controlling and Naming categories as in Swales (2014), Jalilifar and Dabbi (2012), and Samraj (2013). In these studies, Verb controlling was used more than Naming, whereas in Mansourizadeh and Ahmad (2011), Naming was used more than Verb controlling. The contrasts in the findings also involved using integral Naming by expert writers more than Verb controlling by novice writers in the same discipline (Mansourizadeh and Ahmad, 2011). Some of these studies did not consider the comparability of genres (Loi, 2010). For example, comparing published with unpublished articles could be a reason for such conflicting findings.

The universal pedagogical approach in teaching citations has failed to present a comprehensible and sufficient view of the diversity and complexity of the citation practices (Thompson and Tribble, 2001; Hu and Wang, 2014) because each discipline has its own ideology and epistemology (Maroko, 2013). Therefore, due to the differences of citation practices of each discipline, it is a danger to adopt general rules related to citation practices because they cannot be valid in certain contexts (Shi, 2012, p.145). Thus, for writers of other languages, citing in English seems to be challenging (Charles, 2006a; Shooshtari and Jalilifar, 2010; Liao and Tseng, 2010; Polio and Shi, 2012; Hu and Wang, 2014; Rowley-Jolivet and Carter-Thomas, 2014; Luzon, 2015; Nguyen and Pramoolsook, 2015, 2016).

Hence, there is a need to explore citations. Petric` and Harwood (2013, p.121) recommended conducting more studies on *“student writers from different disciplinary backgrounds”* “because kinds of arguments are valued differently across different disciplines (Hyland, 2008). In addition, Yang (2013) suggested conducting

further studies on evidential use across genres due to the variety in genre conventions, as well as using evidential in different cultures could be an interesting topic. Another recommendation was proposed by Rowley-Jolivet and Carter-Thomas (2014) to conduct more studies on citation practices by expert writers of other language origins who have to publish in English. Okamura (2008, p.76) suggested

*„it would be interesting to analyze academic texts with quotations in social science and humanities. Furthermore, to better understand academic discourse it may be necessary to integrate the results of this study with data on reporting verbs and the use of tense in academic texts.“*

The necessity to equip students with knowledge about citation practices through academic writing courses has been recently proposed by several researchers (Petric', 2007; Azlan, 2013; Maroko, 2013; Rabab'ah and Al-Marshadi, 2013; Gol, Hezareh, and Soghondikolaei, 2014; Hu and Wang, 2014; Manan and Noor, 2015; Nguyen and Pramoolsook, 2015, 2016). Consequently, Hu and Wang (2014, p.27) suggested

*“(I)mportantly, pedagogical work on linguistic resources for citation needs to be informed by a coherent functional theory of language as a semiotic tool for construing ideational, interpersonal, and textual meanings in social context.“*

The explicit focus on the lexical grammatical aspects of citations' was also suggested by Nguyen and Pramoolsook, 2015, p.114). This involves studying the constituents of each clause, such as subject', verb', adverbs', and verb that'. Gardner (2012) was one of the researchers who advocates the mutual benefit of focusing on the text in context through Systemic Functional Linguistics and the practices of the individuals ethnographically. Ethnography, as Hyland (2016) points out, provides rich descriptions and interpretations of what the participants do, feel, and think when achieving a task. This can present extensive discussions on citing information and writing the literature review chapter of EFL Arab postgraduates' PhD proposals through their emic perspectives. The linguistic analysis of the texts is

not sufficient unless equipped with information about the practices of the writers in order to understand how the meanings are structured (Gardner, 2012).

Due to lacking studies that adopted Systemic Functional Linguistics on citations, the contrasts in the findings of citations and reporting verbs, and the inconsistency in the findings of the cited author, the present study adopted the Systemic Functional Linguistics in analysing the clauses of the citations in the literature review chapters of PhD theses in Applied Linguistics and Information Technology by EFL Arab postgraduates at Universiti Utara Malaysia. The understanding of the linguistic features and the evaluation of the citation use were also supported by Discourse-Based Interviews (DBIs) with EFL PhD Arab postgraduates and PhD supervisors in Applied Linguistics and Information Technology in order to explore what makes citations challenging for EFL PhD Arab postgraduates.

### **1.5 Research Objectives**

The objectives of the current study are as follows:

- 1- To explore how the interpersonal meanings are expressed in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.
- 2- To describe how the ideational meanings are realised in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.
- 3- To identify how the textual meanings are expressed in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.
- 4- To evaluate the citations use used by EFL Arab postgraduates in the literature review of their PhD theses.

- 5- To explore the challenges faced by EFL PhD Arab postgraduates in the citation practices when writing the literature review chapter of their PhD proposals.

## **1.6 Research Questions**

Due to the limited studies in the field of citation use by EFL PhD Arab postgraduates within the context of the public universities in Malaysia, this study was conducted to bridge this gap and answer the following research questions:

- 1- How are the language metafunctions realised in the clauses of the citations in the literature review chapter of EFL Arab postgraduates' PhD theses?
- 2- What are challenges faced by EFL PhD Arab postgraduates in the citation practices when writing the literature review chapter of their PhD proposals?
- 3- What are the perspectives of the PhD supervisors toward the EFL PhD Arab postgraduates' use of citations in the literature review chapter of PhD proposals?

## **1.7 Significance of the Study**

This study aimed at identifying the citations use and exploring challenges in citation practices in writing the literature review chapter of PhD theses in Information Technology and Applied Linguistics by EFL Arab postgraduates at Universiti Utara Malaysia. The findings of this study may raise the awareness of EFL student writers toward their citation practices, thus they enforce the positive aspects and avoid the weak ones. EFL postgraduates can employ the findings of the present study in their current and future research; they will get more knowledge about the citations types, the preferred type of citation in each discipline, the types of processes, the preferred processes in each discipline, and the types of clauses in the citations. They will also

identify the problems and challenges they face in the process of citing the information from the original sources and integrating it into their academic writing. In addition, the perspectives of the PhD supervisors toward the students' citations practices can shed more light on their appropriate and inappropriate citation behaviors.

The findings of the present study could also equip students' supervisors of the hidden aspects of the citations practices in their students' writing and the challenges facing them in the citations process in the different stages of their postgraduate studies. This implies teaching students the differences between the integral and non-integral citation, the implied evaluation of the verbs used in these citations, as well as how stance is communicated in these citations. Therefore, students' supervisors will be able to provide them with the most appropriate feedback about the conventions and norms used in the citations practices in each discipline.

The findings of the study can be used for pedagogical purposes; EFL Arab postgraduates' performance on citation practices can be exploited by specialists in developing materials for teaching EAP/ESP courses. Gardner (2012) emphasized that researching into the writing practices and participants' perspectives together with text analysis in one study would be essential for the application of the research findings in EAP teaching. Thus, weak points in students' performance can be enhanced by either receiving more emphasis or teaching students how to use citation practices more appropriately. Genre theory and research can be exploited to prepare teachers and educators in the process of teaching second language writing and

developing materials that can be used for writing classes. Thus, based on the findings of the current study, educators in the field of academic writing would direct students' attention to citation practices.

Teaching academic writing course to postgraduate students at the beginning of either the master's degree or PhD degree can be developed based on the students' performance; students' needs, and challenges could be focused more through providing students with the actual use of citations derived from the findings of the study. Thus, such authentic materials can be easier for comprehension and understanding because they are produced within the same context and by students who share a similar lingual and cultural background.

The findings of the present study are based on two theories: the *Systemic Functional Linguistics* and the *New Rhetoric studies*. Consequently, the text in context and the practices in context were involved in the present study which provided a clear description of using the citations practices in the literature review chapters of PhD theses by EFL Arab postgraduates in two domains of knowledge. Researchers in the field of citation practices will get benefit from the findings of the current study because the findings include an extension of the previous studies which were conducted on citation practices. Thus, the findings of this study could contribute to the body of literature, related to the citation use, the challenges in using citations in writing the literature review chapter, and the perspectives of students' supervisors toward their citing behaviors.

## **1.8 Scope of the Study**

Within the New Rhetoric Studies, a qualitative study was adopted in the present study. Discourse Based-Interviews (DBIs) were conducted with EFL Arab postgraduates who have already passed their PhD proposal defense successfully at Universiti Utara Malaysia (UUM) and are currently involved in making corrections or data collection and data analysis procedures. These students are from different Arab countries of the Expanding Circle in two disciplines: Applied Linguistics and Information Technology. The interviews involved having these PhD students comment on their performance in the literature review chapters of their PhD proposals, such as issues related to citation practices and the kinds of problems facing them in citation. The interviews were also conducted with PhD supervisors from Applied Linguistics and Information Technology. Therefore, the findings of the present study are limited to only two disciplines: Applied Linguistics and Information Technology; the study did not cover other disciplines or other EFL Arab postgraduates in other Malaysian universities.

In addition, the literature review chapters of 20 PhD theses by EFL Arab postgraduates in two domains of knowledge were analysed; 10 PhD theses in Applied Linguistics belong to the soft domain, whereas 10 PhD theses in Information Technology are from the hard domain of knowledge. Under the genre analysis of the textual approach, the Systemic Functional Linguistics Approach was adopted in analyzing the clauses in the citations of the literature review chapters of 20 PhD theses. Only the lexico-grammatical analysis was adopted, involving the three language metafunctions: interpersonal, ideational (experiential and Logical) and the textual meanings. Therefore, the findings might not be applicable to other sections, such as the introduction or the discussion sections. Moreover, these PhD theses are

produced by EFL Arab postgraduates; therefore, citations practices produced by other EFL postgraduates from other nationalities or races can be different.

## **1.9 Definitions of Terms**

### **Citations**

Citations are employed in order to indicate a research area. When demonstrating the studies that have been conducted, citations pave the way for the unknown, thus they create a space for more studies to be researched (Swales, 1990).

### **Clause Complex**

The clause complex is the term used by systemicists for the grammatical and semantic unit formed out of two or more clauses which are linked in particular systematic and meaningful ways (Eggins, 2004).

### **Theme**

‘THEME’ represents the element that is chosen by the writer/speaker as the starting point for what is going to be communicated as a message (Halliday, 1985).

### **Subject**

The ‘Subject’ is the element that is responsible for the validity of what the speaker/writer says or writes as a transaction between the speaker and the listener (Halliday, 1985).

### **Actor**

The Actor is the active participant that is portrayed by the speaker as the one who performs the action (Halliday, 1985).

### **Cited Author**

The cited author is the researcher whose information or findings are reported by the citing writer (Thompson and Ye, 1991).

### **Citing Writer**

The citing writer is the researcher who reports the findings and statements of the cited author (Thompson and Ye, 1991)

### **Evaluation**

Evaluation, according to Thompson and Ye (1991), can be simply defined as revealing the writer's stance towards the information in the text.

### **Metadiscourse**

Metadiscourse is defined as revealing the writer's strategy to negotiate and communicate academic knowledge in a way that corresponds to the conventions of the academic community to which s/he belongs (Hyland, 1998a).

### **Modality**

Modality is defined as the intermediate degrees of meaning that fall between yes and no, thus intermediating the positive and the negative poles (Halliday, 1985).

### **Metafunction**

As Halliday (1985) argues, metafunction postulates that the content system in all languages is organized into interpersonal, ideational and textual components.

### **1.10 Organisation of the Thesis**

The present study is composed of five chapters, organized as follows.

**Chapter One** presents an introduction to the present study and establishes the background, states the problem, the research objectives, the research questions, the significance of the study, the scope of the study and definitions of terms used in the study.

**Chapter Two** reviews the related studies and previous literature within the area of academic writing. It includes topics related to the importance of the academic writing, approaches to analyzing the academic discourse, citation practices, and reporting verbs. Finally, it concludes with a framework of the study and a summary of the chapter.

**Chapter Three** presents the methodology adopted in the present study, including the research design, the setting, sampling, data collection procedure, data analysis, a pilot study, findings of the pilot study, trustworthiness, ethical and legal issues, stages of conducting the study, and a summary of the chapter.

**Chapter Four** reports the findings of the citations use by EFL Arab postgraduates. It involves understanding the lexico-grammatical analysis of the clauses used in the citations of the literature review of Applied Linguistics and Information Technology PhD theses adopting three language metafunction: interpersonal, ideational, and textual. The findings also involved the evaluation of the citations and the perspectives of EFL PhD Arab postgraduates and PhD supervisors on the challenges of citation in writing the literature review chapters of their PhD proposals.

**Chapter Five** summarises the study in general and highlights the contribution of the present study to the existing literature. It also provides implications for teaching citations in the academic writing, mentions the limitations of the study, and provides suggestions for future research works.

### **1.11 Summary of Chapter One**

Chapter one introduces the topic of the present study related to academic writing, the background of the population of the study, the domains of knowledge and other issues related to students' problems in citation practices. Then, it introduces the research objectives, the research questions, the significance of the study, the scope of the study, and definitions of terms.

In the following chapter, there is a review of the related studies, focusing mainly on approaches to analysing academic discourse, approaches to analysing genres, using citation practices, types of citations, subcategories of citations, and reporting verbs. There is also an illustration of the conceptual framework and a conclusion of the chapter.

## **CHAPTER TWO LITERATURE REVIEW**

### **2.1 Introduction**

Chapter two reviews studies related to the topic under study, such as the process of writing, features of academic writing, approaches to the study of the academic discourse, and approaches to genre analysis. The following subsections of chapter two also include types of the literature review, challenges in writing a thesis, studies on citations, forms, and functions of citations. The other related subsection focuses on the linguistic structures used with citation types. Other patterns used for evaluation such as metadiscourse devices were also included. Before the end of the chapter, the researcher presents the most recent related studies to citation practices and reporting verbs in different genres and disciplines. Towards the end of chapter two, a conceptual framework for the present study is included which describes the associated concepts related to citations and the three language metafunctions underlying the clauses used in the citations.

### **2.2 Process of Writing**

The process of writing is not ‘a single, homogenous, linear achievement towards which you strive and at which you one day arrive’. Rather, writing is what a person manifests of his/her learning journey and a progressive procedure that entails continuous development, improvement, reflection, and fulfillment of varied types with different processes and stages (Murray and Moore, 2006, p.5). In this regard, Hartley (2008, p.10) argues that writing is distinguished as ‘a hierarchically organized, goal-directed, problem-solving process’. This implies that writing is a complicated procedure (Hartley, 2008; Murray and Moore, 2006), which has four

recursive stages: planning, writing, editing and reviewing, but they are not necessarily occurring in a fixed order (Hartley, 2008). These steps may be faced by EFL Arab postgraduates at the beginning of their PhD study; they started reading sources such as articles, books, and PhD theses, cited information from these sources, integrated the cited information into their writing, edited and reviewed their writings. However, non-native speakers of English are probably challenged with writing in the appropriate style more than native speakers of English (Rababah, 2001; Rababah, 2005; Rabab'ah and AlMarshadi, 2013). The following subsection describes some aspects related to paradoxes of academic writing which might affect students' academic writing.

### **2.2.1 Paradoxes of Academic Writing**

Murray and Moore (2006) listed five paradoxes of academic writing: the starting versus finishing, the logic versus emotion, the easy versus difficult, the public versus private, and the originality versus convention. Paradox one, the starting versus finishing, describes the two stages in writing a project which are totally different, and sometimes due to the obstacles facing a writer after the starting stage, many writers might quit their unachieved goals and even abandon some parts of one's promising work. This paradox is explored in the present study in a way that sheds lights on the challenges that are faced by EFL Arab postgraduates when they started their PhD study. The logic versus emotion of paradox two requires academic writers to reveal objectivity toward the contribution of one's own writing. However, the emotional dimension that affects the written work cannot be ignored. Since the present study involves the analysis of the citations in the literature review chapters of disciplines in two different domains, the findings show how the members of each domain reveal

the subjectivity and the objectivity through the stance they adopt towards the information they cite. Paradox three, the easy versus difficult, implies that writing involves easiness and difficulty which might coincide in the process of writing. Paradox three is clarified by means of exploring the challenges that are faced by EFL Arab postgraduates in writing the literature review chapter through interviewing PhD students and PhD supervisors from Applied Linguistics and Information Technology. Paradox four, the public versus private, indicates that a writer sets for himself/herself a free space to move forward and reward, and play around with ideas. Then, the advances made in the private writing world can be selected to be exposed to a more public domain. Finally, Paradox five, the originality versus convention, differentiates between taking in information and producing one's own words and thoughts. This Paradox is related to the process of reading and citing information from the different sources to be integrated with the literature review chapter of PhD proposals.

In academic writing, the process is not only concerned with conveying the content; rather, it requires the writer to find his/her own individual voice among other writers' voices who might be more expert and possess more knowledge (Hyland, 2002b; Murray and Moore, 2006). However, if the writer detaches himself/herself from the literature, he/she will be exposed to more criticism from more informed experts. On the other hand, if the writer is too close to the conventions of his/her discipline, there will be no room for fresh voices due to the dominance of the popular names in a certain field. For MacDonald (1987), discipline- specific features imply conventions and norms at all levels. For example, research physicists deliver to their students notions and concepts of writing which were formed through their research, whereas philosophers pass notions based on the discipline specific features related to

philosophy. The formal features of each discipline are visible enough causing less problem for the inexperienced writers than the more internalized and implicit assumptions within the disciplines. In other words, comprehending and adopting the internal axiomatics of the discipline is a necessity to write successfully in any field. Writing in a certain discipline, such as Applied Linguistics and Information Technology or in a certain domain of knowledge, requires the writer to follow the conventions of that discipline or domain in order to meet the expectations of the readers and the academic community to which s/he belongs. However, the writer's failure or unfamiliarity with such disciplinary conventions and principles could expose the writer to much criticism.

### **2.2.2 Features of Academic Writing**

What is disliked by many academic writers is their feeling that they are limited in what they desire to say, either due to their lack of the appropriate language or because of following established conventions for each academic discipline (Murray and Moore, 2006). This disciplinary variation reveals significant features about the academic research and writing. Thus, writing in a discipline implies adopting and assimilating specific rhetorical features used previously by members of the academic community. However, learning aspects of only linguistic knowledge is not sufficient unless integrated with the pragmatic knowledge and other conventionalized forms of communication, thus enabling the writer to use the language accurately and appropriately (Bruce, 2008).

Hyland's (2006) argument implies that disciplines have shared distinguished features as a register of academic discourse that is different from the register used at home or

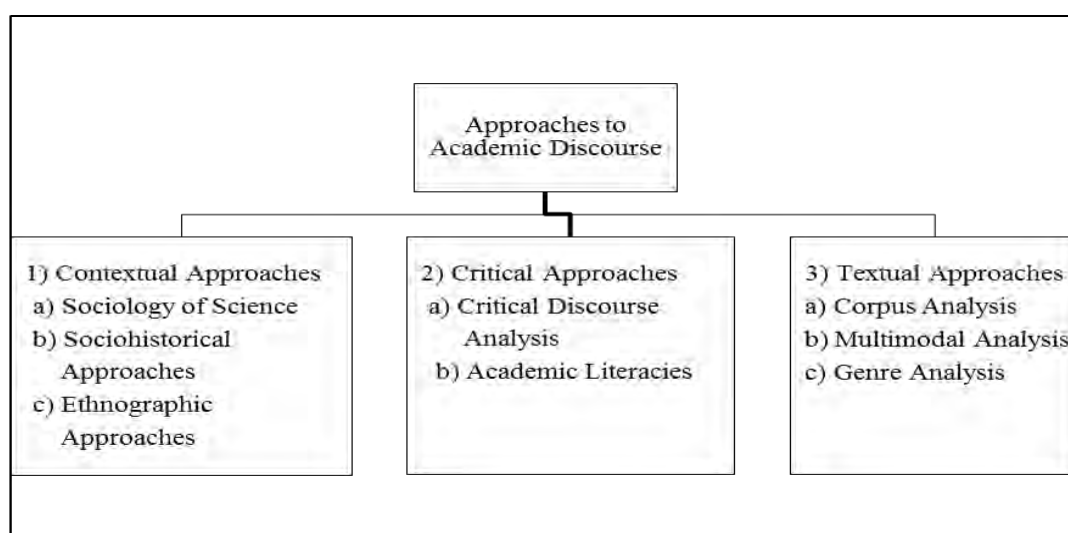
at work. These features of academic writing are grouped into three fields: high lexical density (nouns, verbs, adjectives and adverbs), high nominal style (formation of a noun phrase from verbs and adjectives), and impersonal constructions such as avoiding using I and expressions of feelings. Other related features, such as citation practices and reporting verbs are also genre-specific features which were explained expansively in order to shed more light on the possible similarities and/or differences in using these aspects in disciplines that belong to different domains of knowledge by EFL PhD Arab postgraduates at UUM. In order to identify such distinguished and established disciplinary conventions, analyzing published writing, such as PhD theses, Master dissertations, published articles, book reviews, and other academic texts can be beneficial.

### **2.3 Approaches to Studying Academic Discourses**

As Hyland stated in an interview, analysts are usually varied in their ways or interests when analysing corpora (Viana, Zyngier, and Barnbrook, 2011). A first group of analysts consider writing as a kind of cognitive performance, whereas others are interested in the influence of the local contexts of writing and the actions of writers. A third group of analysts are interested in exploring the cultural and institutional context with the purpose of identifying the ideologies and power relations expressed by writing. Other socially-oriented linguists, such as Ken Hyland, are interested in the texts and exploring the community preferences in using the rhetorical practices that are adopted by a group of writers. Thus, Hyland himself is interested in what people do, when they write and why they do it (Viana, Zyngier, and Barnbrook, 2011).

This latter kind of interest could give us an idea about the speaker's experience of language domain with empirical evidence about language choices and community practices rather than individual writers or individual texts. In other words, the writer's experience and perception of the audience, and being a member of a certain community can shape the way of structuring information, making arguments, and expressing opinions (Viana, Zyngier, and Barnbrook, 2011).

The concept adopted by Ken Hyland as a socially-oriented linguist who is interested in what people do and why they do it and the preferences of the academic community can possibly be similar to the basics of the present study because it is relevant to the Systemic Functional Linguistics (Halliday, 1985). Analyzing and understanding the academic discourse is supported by an integrative theory or a concept. Thus, Hyland (2009b) summarized three main approaches to conduct studies on the academic discourse, including Contextual approaches, Critical approaches, and Textual Approaches, as illustrated in Figure 2.1.



*Figure 2.1. Approaches to academic discourse (adapted from Hyland, 2009b)*

### 2.3.1 Contextual Approaches

The linguists who are interested in analysing texts might go beyond the page or the screen in order to explore how the discourse is represented in the users' cultures. The contextual approaches seem to represent these linguists by establishing the discourse's contextual elements. Under these approaches, Hyland (2009b) selected the sociology of science, the sociohistorical approaches and the ethnographic approaches.

In *the sociology of science*, researchers started looking for a social basis of knowledge through relying on ethnographical techniques, such as participant observation and conversation analysis in order to create knowledge. Within this context, researchers in the field of academic discourse are more interested in preparing academic papers to be published after being socially situated in the context of the society and the institution (Hyland, 2009b).

In *the sociohistorical approaches*, things are true only at a specific time for a particular group of people. In order to understand the academic discourse of a certain period, the cultural practices should be situated in their social context. This means that the conventions of writing have been developed with time in order to cope with the changes in the social situations. The linguistic practices associated with presenting the experiment have been modified and altered toward reports with more emphasis on the methodology and the involved experiments. This implies that research articles are dynamic textual reports rather than static in order to meet the changes in the practices and the norms of the disciplines.

In *the ethnographic approaches*, the individual's behaviors and practices are described through collecting data from varied sources in their natural occurring conditions during a period of time (Ramanathan and Atkinson, 1999). In adopting such an approach, human language and its context constitute a significant part of the setting. The results that are obtained and recycled over a long period of time through adopting multiple sources are verified through member checking technique. However, the ethnographic approach has been criticized for lacking accuracy and involving more subjectivity and the focus on practices only would be insufficient (Gardner, 2012). On the other hand, supporters of the ethnographic approaches claim that this approach presents rich information of first-hand- interpretation on the basis of the interaction within the local context.

This approach has been used widely in the educational research. For example, Prior (1998) conducted a study to explore the effect of the context, including seminar discussions, tutor feedback, interviews with tutors and students, academic practices, and students' personal experiences on the academic writing of graduate students studying at a US university. According to Coffin and Donohue (2012), there is a kind of relative similarity between the ethnographic approaches and the Systemic Functional Linguistics (SFL). Both, SFL and the ethnographic approaches, derive their concepts from anthropology. In addition, SFL has another common feature, where it is best described as an ethnographically-informed text analysis with an etic perspective on the surrounding context of the academic text.

### 2.3.2 Critical Approaches

Critical approaches do not have a specific theory or a group of methods to analyse data, rather they can be best described as an attitude toward a discourse and a way of thinking about texts. The most important approaches in this aspect include *Critical Discourse Analysis* (CDA) and *Academic Literacies* (Hyland, 2009b), but neither one of them was adopted in the present study. According to Fairclough (1989), Critical Discourse Analysis (CDA) considers language as a form of social practice. Based on this view, CDA associates language with the activities surrounding it, focusing on how social relations, knowledge, and identity are constructed through either spoken or written texts (Hyland, 2009b).

Young and Harrison (2004) argue that CDA and Systemic Functional Linguistics (Halliday, 1985; 1994) share three basic features: A) Language is viewed as a social construct, where society is considered as fashioning the language. B) A dialectical view in which 'particular discursive events influence the contexts in which they occur and the contexts are, in turn, influenced by these discursive events'. C) A view which focuses on the importance of the aspects of culture and history on meaning. Thus, SFL offers CDA an advanced way of analysing the relations between the social contexts and language. However, CDA has been criticized for being selecting of particular features of texts to confirm certain aspects of the analyst's prejudices, and at the same time, it reduces the pragmatics to semantics. In other words, CDA practitioners are limited by their linguistic bias which directs them towards the textual linguistic analysis of the discourse (Widdowson, 2000).

The second approach under the critical approach includes Academic Literacies. Although Academic Literacies and CDA are classified under the critical approach (Hyland, 2009b), the perspective of Academic Literacies has a different understanding of 'critical' to that advanced by CDA. Academic Literacies is a way of influencing teaching and learning, and a way of conceptualizing through rethinking literacy with the purpose of taking into consideration both cultural and contextual components of reading and writing. This shared concept by CDA and AL implies looking at language as a discourse practice that is used in a particular context rather than as a group of separate skills (Ivanic, 1998; Lillis, 2001).

One of the dominant features of the academic literacy is the necessity to change practices in accordance with the setting in order to display features of a genre, handle meanings and display identities that suit each setting. Thus, students' challenges in academic writing is not because of grammatical aspects and organisation, rather they are associated with students' varied learning strands interacting with each other and students' previous experiences. Therefore, students moving from a spoken genre to a written academic one have to make a kind of a cultural shift in order to position themselves as members of a certain community (Hyland, 2009b). Thus, the main focus in Academic Literacies is students' lived experiences of the development of the academic writing practices over time. Despite this extending focus in Academic Literacies, text still occupies a significant status in Academic Literacies Approach.

The following section addresses the textual approach in studying academic discourses, which is adopted in the present study as a general framework, specifically the Systemic Functional Linguistics of the Genre Analysis.

### **2.3.3 Textual Approaches**

Textual approaches focus mainly on the choices of language, patterns, and the meanings of these patterns used in texts, based on a corpus analysis, a multimodal analysis, and a genre analysis.

#### **2.3.3.1 Corpus Analysis**

According to Halliday and Webster (2009), a collection of texts which are chosen and ordered based on certain criteria, such as representativeness, sampling and balance, can be called a corpus. This corpus may be a mono-generic corpus, or a multi-generic one, such as the Corpus of American English. A corpus analysis is different from the qualitative variants of genre analysis because a corpus analysis is based on large databases, about millions of words of electronically encoded texts. Therefore, such a corpus analysis represents a solid base for describing a specific genre (Hyland, 2009b). What a corpus analysis can offer is presenting insights into familiar patterns of language use which might be unnoticed. Thus, it can be said that in corpus studies, qualitative and quantitative methods are adopted and supported by further evidence such as frequencies of occurrence in order to present more interpretations for the patterns and features of languages.

Generally, the concept of frequent occurring words in the context of academic field seems to be acceptable. Corpus studies reported the most frequently used words in English and found that *the, of, to* are the top three words, making up about 10% of the actual use in a corpus of 400-million word Bank of English corpus (e.g. Kennedy, 1998). These words are assumed to help university students cope with the requirements of the academic environments. However, significant issues were

ignored, including the collocations of words, the semantic association, and how words are really used in the actual academic field. Such an issue possibly causes students a kind of misunderstanding and misuse.

Therefore, Hyland and Tse (2007) examined Coxhead's (2000) Academic Word List in order to explore the distribution of its 570 word families in a corpus consisting of 3.3 million words across different genres and disciplines. Coxhead's (2000) Academic Word List (AWL) is believed to be beneficial for students in meeting their academic requirements in different fields and domains of knowledge because the words in this (AWL) will help students distinguish academic from general English. All the 570 of the Academic Word List (AWL) word families occurred in the academic corpus, covering 10.6% of the words. Although the list covered a good percentage of the academic corpus, the distribution was not even, particularly in the students' corpus of sciences, indicating that students would stumble over an unknown item about every five words' (p.6), thus resulting in an incomprehensible text. These variations in words usage could suggest that some disciplines, such as sciences, need more technical and specialized vocabulary. However, a difficulty arises in compiling a so-called common core of academic vocabulary because a list of such words should include frequency, range of criteria and their similar usages across the different disciplines. Hence, contextual factors are very important in language choice because members of the research communities communicate as social groups (Hyland and Tse, 2007).

Corpus analysis has been criticized for not containing any new theories about language and for presenting only a partial explanation of the language use and for

describing the text as a product rather than as a process (Hyland, 2009b). In addition, the researchers in the field of corpus analysis are more concerned with the most commonly and frequently used words in a certain genre rather than with what can occur. However, the evidence of frequency utilized by the corpus analysis is possibly not appropriate to the objectives and the underlying concepts in the present study. The frequent use or overusing some linguistic features by EFL PhD Arab postgraduates might not be in accordance with the principles and conventions of a particular academic community. Moreover, the concordances used in the corpus analysis are based on displaying all instances of a search word or a phrase as a list of unconnected lines of text (Hyland, 2006). However, in the present study, the researcher is more interested in what can occur in the students' PhD theses with regard to the citation practices, types of clauses, interpersonal meanings, textual meanings and ideational ones.

The following description elaborates on the multimodal analysis as the second type under the textual approach.

#### **2.3.3.2 Multimodal Analysis**

According to some linguists, linguistic discourses are not only limited to the linguistic forms but also include several varieties of meaningful semiotic activity (e.g. Blommaert, 2005). This variety includes not only the verbal but also the visual elements of genres in journals and advertisements. Both aspects are important elements of many academic genres. Therefore, there seems to be an integrated view to study this new trend through adopting multimodal analyses (Hyland, 2009b). Limited studies have discussed the interaction between the verbal and the visual

elements in the different genres. Therefore, there can be much to learn about the influence of adopting such visual devices (Hyland, 2009b). However, this type of genre analysis is not adopted in our present study.

### **2.3.3.3 Genre Analysis**

The French word *genre* meaning *type* or *kind* has been used to refer to literary categories, including novels, novellas, short stories, and prose; this classification is based on the features of the style of writing and the structural patterns (Moessner, 2001). However, the term *genre* is not only limited to literary categories but also includes non-print media, such as films, stage drama and graphic art or other written texts, such as newspapers editorials, letters, and other different types of academic texts (Bruce, 2008). These genres can be either written, such as research articles, conference abstracts, undergraduate essays, submission letters, book reviews, PhD theses, and textbooks, or spoken genres, including seminars, lectures, colloquia, student presentations, conference presentations, PhD defenses, and admission interviews (Hyland, 2009b).

Martin (1992) argues that people are usually socialized into the language that expresses social class or gender. Thus, student writers are socialized into the language of academic thinking and academic disciplines. Consequently, knowing how physicians, chemists, linguists and other specialists read and interpret their disciplines requires exploring their perspectives through conducting interviews which could lead to rich information about their performance. Therefore, in the present study, discourse-based interviews were conducted with EFL PhD Arab

postgraduates to ask them about their experience in using citation practices in writing the literature review chapters of their PhD proposals.

In the following section, there is more elaboration on the three types of genre analysis presented by Hyon (1996). Genre analysis has got much attention in the field of applied linguistics, where three main approaches for analysing genres have emerged, including English for Specific Purposes (ESP) and EAP, North American New Rhetoric studies, and Sydney School of Systemic Functional Linguistics (SFL). In spite of their differences, ‘all three traditions can be recognised as socio-pragmatic discourse analysis, as they consider text in relation to social practices and practical, purposeful mediators’ and the three traditions are concerned with academic discourse (Sawaki, 2016, p.3). Hence, as Swales (2009) states, the boundaries between the three traditions are not clear-cut. Figure 2.2 presents three types of genre analyses.

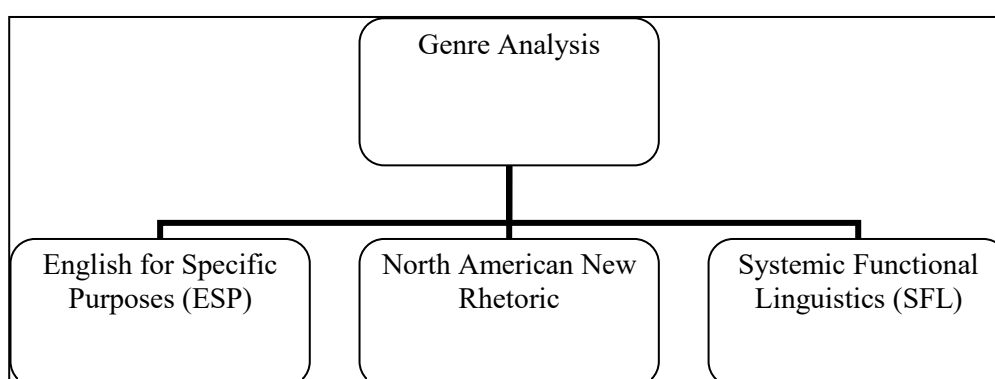


Figure 2.2. Types of genre analysis (adapted from Hyon, 1996)

Hyon's (1996) study revealed that ESP and the Australian SFL genre research provide instructors of English Second Language (ESL) with insights of the written texts' linguistic features as well as advantageous guidelines to present these linguistic

features in the classroom. On the other hand, the North American New Rhetoric School provides language instructors with a full perspective of the institutional contexts surrounding the professional and academic genres, as well as the functions of these genres in these settings.

#### **2.3.3.3.1 English for Specific Purposes (ESP)**

The first emerging approach was based on the work of Swales (1981) in the field of English for Specific Purposes (ESP) (see e.g. Dudley-Evans, 1989, 1994; Swales, 1990; Bhatia, 1993; Hyland, 2006, 2009b). The interest of researchers in the school of ESP has been in using genre as a tool to analyse and teach non-native speakers the spoken and written language in the academic and professional settings (see Swales, 1990; Bhatia, 1993), as well as applying the theory of genre, English for Academic Purposes (EAP) and English for Professional Communication (EPC) in classrooms.

However, scholars and researchers in the scope of ESP have been more interested in analysing the texts, giving more attention to the formal features of genres, the teaching of genre structures and grammatical features, and less focus to the specialised functions of texts and the social context. An example of this genre analysis is using structured move analyses in describing the organisational pattern in genres of experimental research articles and examining the grammatical features at the sentence level, including aspects such as verb tense, hedges, and passive voice. Consequently, the researching practices that adopt the ESP/EAP tradition of generic structures represented by Create a Research Space (CARS) Model still need a lot of improvement due to presenting a fixed structure. Hence, such methods should take into account the variety in genre (Sawaki, 2016).

#### **2.3.3.3.2 New Rhetoric Studies**

The second emerging approach is called the ‘North American New Rhetoric’ studies, that is mostly prominent in North America (see e.g. Bazermann, 1988; Hyon, 1996). Scholars adopting this approach are different from those of ESP in conceptualizing and analysing genres that are concerned with L1 teaching, including composition studies, professional writing and rhetoric. Additionally, scholars of the New Rhetoric differ from those of ESP in emphasizing more on the genres’ situational contexts and the social purposes or actions fulfilled by these genres rather than on the forms of these genres.

Miller’s (1984) article entitled ‘Genre as Social Action’ had an effect in shaping New Rhetoric genre theory in L1 disciplines. Miller argues that the focus must not be on the substance or the form of the discourse but on the action. Other scholars in the New Rhetoric fields adopted ethnographic methods for analysing texts, such as interviews, document collection, and participant observation, rather than linguistic ones, thus presenting detailed descriptions of both the professional and the academic contexts of the genres (Schryer, 1993). Gledhill (1996) and Hyland (1998b) are among the other researchers who relied on interview data to supplement their corpus analyses. For instance, Gledhill (1996) adopted an ethnographic approach by consulting specialist informants on which texts they considered to be most representative of the field in order to obtain a balanced corpus. Meanwhile, Hyland (1998b) has consulted specialist informants on the use of hedging devices in a corpus of 80 research articles. Consequently, the North Rhetoric studies with their ethnolinguistic methods, such as interviews, was adopted in the present study to highlight the perspectives of EFL PhD Arab postgraduates and PhD supervisors on

using citations in writing the literature review of their PhD proposals in Applied Linguistics and Information Technology.

The New Rhetoric school views genres as ‘fluid and dynamic’, but at the same time, these genres are ‘stabilized for now’. Genres are considered as a form of social actions. This implies that forms of social actions, rather than forms of the discourse or the substance in these genres are not stable, but they are always open for change and negotiation (Hyland, 2006, p.48). Scholars’ work in the New Rhetoric area began to influence the practice and genre theory of ESP. The New Rhetoric supporters are against considering the genres as materially objective things and against teaching texts as fixed templates because genres evolve and develop in order to meet the changing requirements and needs of technologies, situations, and communities (Hyland, 2006).

#### **2.3.3.3.3 Systemic Functional Linguistics**

Though the Australian genre theories have developed at the same time with the ESP and the New Rhetoric studies, these Australian genre theories were independent of the ESP and the New Rhetoric studies, and have centred within a larger theory called Systemic Functional Linguistics that was developed by Michael Halliday, who founded the department of linguistics at the University of Sydney in 1975. Hence, his theory had an effect on education and language theory in Australia (Hyon, 1996). Halliday and Martin (1993) presented five orientations in order to summarise the specific features of Systemic Functional Linguistics (SFL).

**Rule/resource-** SFL is concerned with describing the language as a resource for meaning rather than as a system of rules' (p.25). Hence, SFL focuses on the meaning potential of what the speaker can mean.

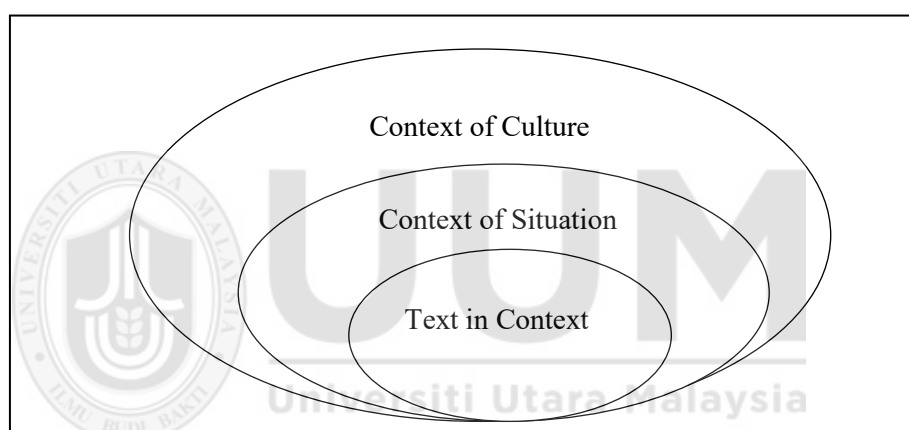
**Sentence/text-** SFL focuses on texts rather than sentences since the text is the unit that is used to negotiate meaning. Although the present study does not focus on analysing the text as a whole, the citations types are analysed considering the text in which they were used. In this regard, Coffin and Donohue (2012, p.65) argue that in SFL, text refers to units as small as a clause or as large as an entire academic monograph“.

**Text/context-** The focus of the Systemic Functional Linguistics is on the solidary relationships between the text and the social contexts and the social practices they realize. In other words, the text is not looked at as a decontextualized structural entity. For example, the science as a text and the science as an institution are two complementary perspectives on the scientific discourse.

**Expressing/constructing meaning-**Systemic Functional Linguistic focuses on the language as a system that is used to construct meaning. Hence, language is viewed as meaning-making rather than a channel to express thoughts and feelings.

**Parsimony/extravagance-** The orientation of the SFL is toward extravagance rather than parsimony. In other words, SFL is concerned with developing a model where the universe, life, and language can be viewed through semiotic and communicative terms.

According to Bruce (2008), the Systemic Functional approach in classifying texts is derived from the concepts of the social anthropologist Bronislaw Malinowski, whose proposal implies understanding the language within the local situation and the cultural context. Thus, this approach emphasizes the social use of the language and its interpretations as a discourse, revealing the implication that language is a social-semiotic system that is able to express the potential meaning used by the society. The stratified theory of text in context is illustrated in SFL as a series of nested circles, as in Figure 2.3 (Halliday, 1985; Martin and Rose, 2008, P. 10).



*Figure 2.3. A Stratal interpretation of the relation of language to social context*

SFL is a theory of semiotics from a social-semiotic perspective. In this regard, language is considered as a semion realized in two contexts: the situational context and the cultural context. Halliday has characterized the three dimensions of situation as follows: Field, Tenor and Mode which constitute the register of a text. When this register changes or varies, the patterns of meanings in the texts also change and vary (Halliday, 1985; Halliday and Hasan, 1985). Overall, tenor, field and mode are called the register variables (Halliday and Martin, 1993; Martin and Rose, 2008). Field refers to what is happening, the core of the social action that is happening, and what

the participants are engaged in. Tenor refers to the participants, their roles and status, whereas mode refers to the symbolic realisation of the text and the part of language that has a role to do within the context (Halliday, 1985; Eggins, 1994).

These three context variables (field, tenor, and mode) simultaneously work together to produce a kind of configuration of meaning. This configuration, in its turn, has its role in determining both, the form and meaning of its text, including three dimensions of meaning: ideational, interpersonal, and textual meanings. Thus, in SFL, a close relationship is between the three aspects of context of situation: field, tenor, and mode, and the concept of language metafunctions: ideational, interpersonal and textual (Halliday, 1985; Halliday and Martin, 1993; Eggins and Martin, 1997).

Field is associated with the ideational meta-function that is concerned with the logical relation of one going-on to another and with constructing experience: what is going on, including who is doing, what, to whom, where, when, why and how'. Under the logical relations of clauses, Halliday (1985) assumes that the notion of clause complex presents a full description of the functional organization of the sentences. The sentence is defined as a clause complex, and clause complex is the only grammatical unit above the clause. Thus, the sentence is a constituent of writing recognized orthographically between two full stops, whereas the clause complex represents a constituent of grammar. The following example shows how the ideational metafunction is realized in the clause through the transitivity system.

e.g. (1) Swales studied citations.

Swales	Studied	citations
Actor	Process: material	Goal

In example (1), a clause simplex with only one clause is used. The process ‘studied’ is used as a material process that reflects what happened in reality. Two participants are involved with the material process; these include ‘Swales: Actor’ and ‘citations: Goal’.

The previous studies focused only on three types of reporting verbs used in citations (Francis et al., 1996; Hyland, 1999; Thomas and Hawes, 1994; Thompson and Ye, 1991). However, other types of verbs like relational, existential, causative, and possessive processes were not included in these studies. Hence, the present study adopted SFL which involves a Transitivity System that describes each process used in each clause of the citations.

Example (1) mentioned above cannot be analysed under the logical meanings since the logical meanings are concerned only with sentences of clause complexes. Hence, the two clauses involved in one sentence are joined either hypotactically or paratactically through either expansion or projection.

e.g. (2) He states that citations are important.

<b>He states</b>	<b>that citations are important.</b>	
Projecting clause	Projected clause	Projection
Dominant clause	Dependent clause	Hypotaxis

Projection is realized mainly by two clauses, in which a verbal process or a mental process is employed in the projecting process, whereas the projected clause includes any other type of processes.

The logico-semantic relationship can be also expressed through expansion through using material processes, behavioural processes, existential processes or relational processes in the initiating clauses, in which two clauses are joined either paratactically or hypotactically.

e.g. (3) Hyland analysed 80 research articles and studied citations.

Hyland analysed 80 research articles and studied citations.			Logical Meanings
Initiating		continuing	Expansion
Independent clause		Independent clause	Parataxis

The main difference between projection and expansion is that projection is limited only to two types of processes ‘verbal or mental’ that are used in the projecting clause. Verbal processes include ‘say, state, mention, suggest, propose, point out, claim, etc. Regarding mental processes, they include ‘think, believe, feel, see, etc.

Studies on citations did not consider the type of clause used in citations (Francis, et al., 1996; John, 2012; Swales, 2014; Yang, 2013). For example, Swales (2014) divided citations into reporting or non-reporting citations depending on Hyland’s (1999) taxonomy of the reporting verbs. However, in the present study, citations with clause complexes were analysed under the logical meanings adopting the SFL.

The relation between clauses under the logical component of the linguistic system which is the functional-semantic relations that make up the logic meanings is realized through two dimensions. The first dimension is the system of interdependency or tactic system including parataxis and hypotaxis relations between clauses of a clause complex. The other dimension is the logico-semantic system of

expansion and projection which is known as an inter-clausal relation or the relation between processes (Halliday, 1985, 2014).

Tenor is the second register variable that is associated with the interpersonal meta-function that is concerned with the discourse's social meaning, including both the interactional and the transactional meanings; how people are interacting, including the feelings they try to share. Halliday (1985) states that language is used to establish a relationship between the speaker and the addressee. To establish this relationship, different speech roles are adopted. These are clarified in Table 2.1

Table 2.1

<i>Speech Role</i>		
<b>SPEECH ROLE</b>	<b>COMMODITY EXCHANGED</b>	
	<b>Information</b>	<b>Goods and services</b>
Giving	Statement	Offer
Demanding	Question	Command

Adapted from Eggins (1994)

Statement, question, offer, and command are the four basic move types that refer to speech functions. Hence, each dialogue includes these speech functions. If a person wants to make a statement, he will use a clause with a declarative structure, as in the example below:

e.g. (4) It is Swales' classification of citation. (Statement)

On the other hand, if the speaker wishes to make a command, the imperative is used:

e.g. (5) Read this book. (command)

In offering something to the addressees, a modulated interrogative is used as in the example below.

e.g. (6) Would you like to read this book? (offer)

When asking a question, an interrogative clause is used:

e.g. (7) Have you read about citations? (question)

Exploring the Mood structure under the interpersonal metafunction focuses on how clauses are structured to exchange information. A clause usually consists of two components: MOOD and RESIDUE. MOOD involves Subject and Finite, whereas RESIDUE includes Prædicator, Complement, and Adjunct.

e.g. (8) Citations were studied by Swales.

<b>Citations</b>	<b>Were</b>	<b>studied</b>	<b>by Swales.</b>
Subject	Finite	Predicator	Adjunct
MOOD		RESIDUE	

Studies on citations focused on the type of the verb to reveal the kind of stance by either the citing writer or the cited author (Francis et al., 1996; Hyland, 1999; Thomas and Hawes, 1994; Thompson and Ye, 1991). For example, the reporting verb suggest is classified as having a positive stance. However, these studies neglected other constituents in the clause that can affect the stance revealed by the reporting verb. For instance, using finite modal operators like can, could, may, might, and must can neutralize the positive stance of the reporting verb suggest.

The third register variable is associated with the textual meaning which refers to how semions and symbols are organised to express the ideational and interpersonal meanings. In other words, the textual meaning is concerned with information flow; the ways in which ideational and interpersonal meanings are distributed in waves of semiosis (Halliday and Martin, 1993; Martin and Rose, 2008).

According to Halliday (1985), a clause is a unit that involves three different kinds of meanings simultaneously. These include the ideational, the interpersonal, and the textual meanings. The textual meanings encompass the ideational and the

interpersonal meanings. The clause is organized as a message, in which two elements are employed. One element is called THEME that is the familiar type of information, whereas the other part is called RHEME, representing the new type of information.

e.g. (9) Swales (2014) analysed reporting and non-reporting citations.

Swales (2014)	Analysed		reporting and non-reporting citations.
Subject	Finite	Predicator	Complement
Actor	Process: material		Goal
Interpersonal			
Topical			
THEME	RHEME		

The textual meanings can enhance the findings related to the interpersonal and the ideational metafunctions since the textual metafunction encompass both. For example, using Marked Theme with a high number of frequencies under the textual metafunction is the result of the high use of circumstantial participants (secondary prepositional constituents) under the ideational metafunction.

Figure 2.4 illustrates the relationship between Tenor, Mode and Field and the three language metafunctions.

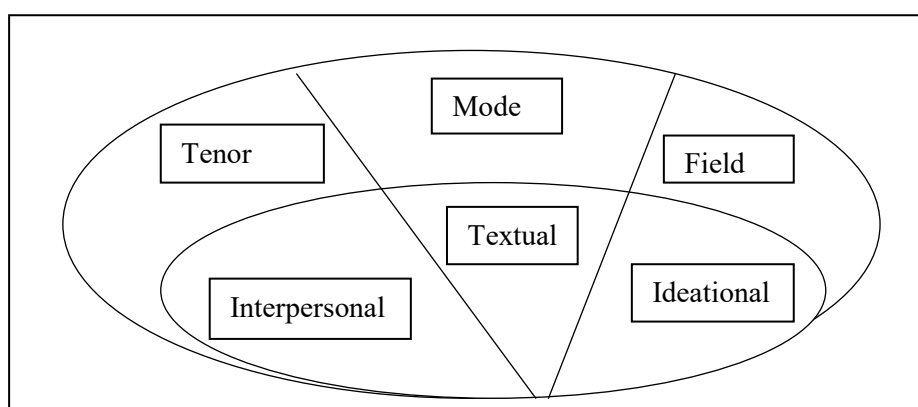
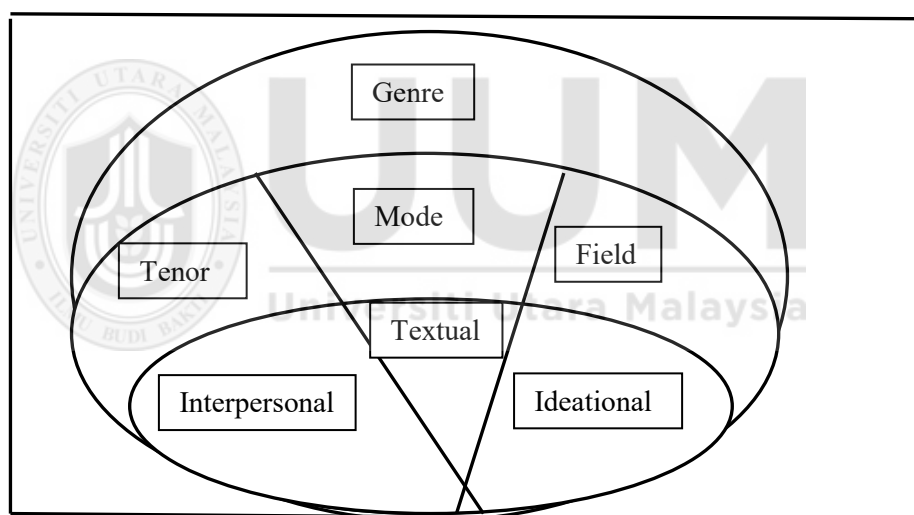


Figure 2.4. Field, tenor and mode in relation to language metafunctions (adapted from Halliday, 1985)

In Martin's terms (1996, 2000) each metafunction is associated with a particular concept; ideational meaning with particulate structure, textual meaning with periodic structure and interpersonal meaning with prosodic structure (Martin and Rose, 2008). In particulate structure, the segments are organized either in orbital, similar to the solar system and atoms with only one nucleus and having other segments depend on it, or in serial patterns, where each segment depends on one another in a chain but without having one main nuclear element- multi-nuclear structures. The other point implies the association of textual with periodic structure where meaning, whether orbital or serial structure, is organized in a form of information waves. The third metafunction, interpersonal, is associated with the prosodic structure, where the author attempts to color his/her discourse with different colors using descriptive and evaluative lexis, such as *sweet, loving, very loved*.

Prosodic structures are mapped onto discourse in two ways: saturation and intensification. For saturation, the writer tries to realize a meaning through using attitudinal adjectives to express his/her feelings and stance, whereas for intensification, the writer attempts to give strength for his/her feeling by means of using modifiers, such as *very loved*, or using iteration, such as *loving, cute, and sweet*. A third way to map prosodic structure over several patterns of a discourse is to link it with a position or an attitude adopted by the experiencer to express his/her stance toward, for example, a trip to somewhere by saying, *it was very fun*. Overall, textual meaning encompasses both interpersonal and ideational meaning together, making a kind of reconciliation between periodic, prosodic, and particulate structures (Martin and Rose, 2008).

Regarding the present study, tenor refers to the Arab postgraduates whose PhD theses in Applied Linguistics and Information Technology were selected in order to analyse the clause of the citations used in the literature review. Field refers to the patterns of the discourse which reveal the nature of the activity that takes place. This includes areas related to Applied Linguistics and Information Technology because the PhD theses that were analysed focus on these two disciplines. The third element is mode which refers to the communication channeling and the texture of the information. Thus, mode in the current study refers to the academic writing used by the postgraduate student in writing their PhD theses.



*Figure 2.5. Genre as an additional stratum of analysis beyond tenor, field and mode*

These three elements that constitute the social context determine the language register. Thus, Halliday's (1978) main concern was register and he treated genre as an aspect of mode, whereas Martin and Rose (2008) argues that each genre involves a particular configuration of the three variables: mode, field, and tenor. Thus, genre is modeled at the culture stratum beyond the level of register, as in Figure 2.5.

SFL of genre analysis has a great effect on teaching English as the first and second language in Australia (see Halliday and Hasan, 1989; Halliday, 1994; Halliday and Webster, 2009). Several basics support SFL: A) When writers or speakers choose a language, the context is interrelated with this choice. B) Meaning is created through language as a resource. C) Each text or utterance has three types of meaning: textual, ideational and interpersonal (Halliday and Webster, 2009). D) Language can be explored as a tool system or a specific text.

Basically, text in context is the main unit of analysis in Systemic Functional linguistics research, but less focus is paid to the lived experiences of writers and readers or their views toward texts (Coffin and Donohue, 2012). According to Coffin and Donohue (2012), SFL is equipped with the capacity of using features of the texts to make a generalization of the genre represented by the text structure or the register represented by the language choice. Lillis and Scott (2007) argue that researching the academic writing is characterized by the focus on the text and the absence of practice and this is considered problematic. This aspect motivated the researcher in the present study to conduct discourse-based interviews in order to get EFL PhD Arab postgraduates' emic perspectives on using citations in writing the literature review of their PhD proposals.

Systemic Functional Linguistics can be used for researching and teaching academic literacy within the first and second language context. As a consequence, analysing a text in SFL is not done without taking the context of use into consideration with an etic perspective (Coffin and Donohue, 2012). This is achieved in the present study through analysing the clauses of the citations used by EFL PhD Arab postgraduates

who finished their PhD study at UUM. Therefore, the objectives in the present study are not only to identify students' use of the citations in writing their literature review of their PhD theses but also to explore EFL PhD Arab postgraduates' perspectives on citation practices under the North American New Rhetoric studies. In this regard, Woodward-Kron (2004) and Gardner (2012) revealed the advantage of using ethnographic approaches in providing a description of the academic genres and the student writing's context. Thus, it is argued that the ethnographic methods that are associated with the academic practices of the university students and the linguistic methods that are associated with the systemic Functional Linguistics must be conducted together (Gardner, 2012).

After discussing the approaches in analysing academic discourse and genre analysis, we discuss in the following sections the importance of the literature review, its types, and the challenges faced by non-native speaker writers in academic writing.

## **2.4 Literature Review**

According to Swales and Feak (2000), the literature review constitutes a basic part of a research article, a dissertation or a thesis, but it is boring. Hence, this part is mostly criticised and is rarely praised. Including the literature review in a thesis is highly critical since it justifies the value of the research, reveals its characteristics that distinguish it from other studies (Peters, 1997; Rudestam and Newton, 2001; Creswell, 2003) and contextualizes the student's research study (Paltridge and Starfield, 2007). Reviewing the literature, according to Hart (1998, 2001), can familiarise the researcher with the relevant studies, prevent duplicating the study,

avoid flaws committed in other studies, reveal the research design of the researcher's study, and indicate gaps that justify conducting his/her study.

#### **2.4.1 Types of the Literature Review**

Feak and Swales (2009) argued that when writing the literature review, a writer can follow some basic types which are narrative literature review, systematic literature review, meta-analysis, and focused literature review. Narrative literature review is usually followed in PhD theses, master's dissertations, research proposals or research articles. In such a type, the author purposefully selects the previous studies and makes them in a sort of synthesis in order to present a sort of coherent discussion. In systematic literature review, a particular method is employed in including or excluding the previous studies. Such a type of writing the literature review that is common in the field of health sciences may reduce the author's bias. Meta-analysis is a third type of the literature review in which data is collected from a variety of studies that address a certain research question. The data that is collected is examined and reanalysed in order to present a clear picture of the topic under study. Focused literature review is a fourth type that is limited to a single aspect. In such a type, the author depends on the methodological review that addresses methods, approaches and research designs. Hence, there will be an implication for collecting the data, analysing it and interpreting it. Consequently, a student should follow a particular type of the literature review since the audience, such as readers and examiners, have certain expectations related to the structuring format of the information in each text (Swales and Feak, 2012).

As for the present study, the citations that were analysed were extracted from the literature review of the PhD theses. Although the purpose of the present study is not to identify the type of the literature review, it is assumed that this literature review is classified as Narrative Literature Review as was described by Feak and Swales (2009). In this literature review, there could be a description of a background theory, a review of related studies or both. According to Hart (1998), the literature review of a PhD thesis should involve an analytical synthesis, a high degree of conceptual linking of theories, critical evaluation (Paltridge and Starfield, 2007), and depth of discussion. One significant characteristic of the literature review that students might not be aware of is the necessity to have a detailed description of the previous related studies (Paltridge and Starfield, 2007).

#### **2.4.2 Challenges in Writing a Thesis**

Writing a thesis is challenging for all students, and for non-native speakers, this challenge increases (Paltridge, 1997; Prior, 1998; Paltridge and Starfield, 2007). Paltridge and Starfield (2007) listed the challenges that are faced by non-native speaker writers of English who are involved in a PhD study in four categories: psycho-affective issues, behavioural issues, social issues and rhetorical issues. Psycho-affective issues involve what is called *impostor syndrome*, whereby the international student who is involved in writing a thesis experiences anxiety, fear and loss of confidence in his/her ability to write a research thesis. International students probably also have behavioural issues that can affect their writing negatively. In other words, many students believe ‘romantically’ that writing is a creative act that is done only when a student is inspired spontaneously. Hence, Zerubavel (1999) recommends that, for successful writers, writing is a habit. Therefore, in order to

produce a text, a text must have been produced earlier. That is to say, a student has to start writing earlier and most often since academic writing at an advanced level is more than writing down ideas or using good English (Atkinson and Curtis, 1998). Thus, writing from the very beginning of a PhD study might reduce the complexity of writing through dividing it into several simple stages of writing (Paltridge and Starfield, 2007).

Social issues also have an effect on theses' writers. It is well-known that a PhD study probably isolates the PhD student, and this isolation affects a student negatively in not receiving feedback from his/her colleagues. Therefore, encouraging students to give comments and meet regularly would contribute to the development of one's writing (Paltridge and Starfield, 2007).

Regarding the rhetorical issues, it was demonstrated that non-native international students had challenges represented by lacking language proficiency in their academic writing (Sawir, 2005; Andrade, 2006; Ibrahim and Nambiar, 2011). This poses a challenge in word choice 'diction' to express their concepts accurately and appropriately (Shaw, 1991; Flowerdew, 1999; Qian and Krugly-Smolka, 2008; Wang and Li, 2008). The culture of these international students also had its negative impact on their academic writing. The influence of culture was represented by the effect of their first language writing conventions and way of thinking, and avoiding direct critique of other opinions (Flowerdew, 1999). The international students' writing performance showed pedagogical needs which required their supervisors to spend time in correcting language issues and structural mistakes (Paltridge and Starfield, 2007; Qian and Krugly-Smolka, 2008; Wang and Li, 2008).

Dong (1998) argues that graduate students who have to write a thesis or a dissertation struggle with their writing not only because of the high standard required in the thesis but also due to the necessity to display the knowledge of their research topics logically and coherently. In this sense, Tardy (2005) points out that the linguistic abilities are not sufficient to show an advanced level of academic literacy; rather, a student needs to employ rhetorical strategies that are specific-discipline when displaying information. Dunleavy (2003) emphasized that a thesis writer should meet the expectations of their readers since English language is ‘writer-responsible’; the writer or the speaker is responsible for clarifying and organizing the concepts (Hinds, 1987). One significant key to acknowledge their roles as writer responsible is through using metadiscourse (Dahl, 2004) in order to organize the text and interact with the reader. Metadiscourses are also used to reveal the academic voice which is rather challenging in English for non-native speaker writers (Shen, 1989; Paltridge and Starfield, 2007). Hence, moderating a writer’s claim is fundamental which should not be too strong nor too weak. In other words, it should involve hedging in order to persuade the reader of the arguments. Another distinguished feature of research writing is referencing to other studies. Citation is best described in the following quotation.

*„We are like dwarf on the shoulders of giants, so that we can see more than they, and things at a greater distance, not by virtue of any sharpness of sight on our pan, or any physical distinction, but because we are carried high and raised up by their giant size.””(John of Salisbury as cited in Feak and Swales, 2009).*

The importance of citations in establishing a research background and making the argument acceptable has attracted the interest of several studies. More discussions on citation types, functions, and their linguistic structures are explained in the following section and subsections.

## 2.5 Citation

The significance of citation use is implied in their role to exhibit scholars' knowledge in a certain field, build their works on such knowledge or criticize it and claim membership of a certain research community (Hewings, Lillis, and Vladimirou, 2010; Petric and Harwood, 2013; Samraj, 2013; Swales, 2014). The concept of referencing to other researchers' studies is one of the distinguished characteristics that has occupied the interest of researchers in the field of academic writing (Thomas and Hawes, 1994; Hyland, 1999). These researchers (Thomas and Hawes, 1994; Hyland, 1999) argue that referencing to other studies or reporting is the attribution of the cited information and the propositional content to other sources outside the author's own writing.

Students' ability to integrate the information from outside sources into their writing is an essential skill in the academic field. However, the process of citing from outside sources implies complex issues, such as what to cite, who to cite, how to cite and when not to cite (Polio and Shi, 2012). This represents a challenge particularly for non-native speaker writers of English (Law *et al.*, 2013; Rowley-Jolivet and Carter-Thomas, 2014) because citations have implied evaluation (Thompson and Ye, 1991). Citation use differs based on the genre, the domain of knowledge and the personal choice; therefore, analyzing genres could result in different types of citations with different functions.

### 2.5.1 Types of Citations

Citation was divided by Swales (1990) into two basic distinctions: integral and non-integral citations. In the former type, the author or authors are part of the cited

sentence because the cited author is integrated with the structure to function as a subject, an agent, a part of the noun phrase or an adjunct. This type of citation focuses more on the actions of the researchers and gives these researchers more prominence. On the other hand, in the non-integral citation, the author is put in parentheses or represented by a number, thus emphasizing more the findings of the research, whereas the author's role is downplayed. Choosing either integral or non-integral citation is a complicated procedure due to the influence of the citation conventions, genre, discipline, students' social and epistemological conventions, and audience (Charles, 2006a; Jalilifar and Dabbi, 2012).

Based on Thompson's (2001, 2002) taxonomy, the integral citation was classified into three sub-categories, Verb controlling, Naming, and Non-citation. In Verb controlling, the author is in the position of the subject or an agent in either active or passive structures, respectively with a controlling verb.

e.g. Brown and Yule (1983) **point out** that the theme.....

Naming is the other type that is used to refer to the citation as a part of a noun phrase, as in the example below.

e.g. "Typical price elasticities of demand for poultry products in Canada, Germany and the UK are shown in Harling and Thompson (1983)".

Non-citation is the third subcategory of the integral citation, in which only the name of the cited author is mentioned without being followed by a year because it was mentioned earlier, as in the example below.

e.g. Swales classified citations into integral and non-integral citations.

On the other hand, the non-integral citation was classified by Thompson (2001, 2002) into four subcategories, including source or attribution, identification, reference and origin. Source or attribution refers to the source of the idea or the cited information and attributing it to another author, as in the example below.

e.g. Citations were divided into two types (Swales, 1990)

Identification identifies the agent within the sentence it refers to. An example of this is listed below.

e.g. A great deal of research has been done in the field of citations (Swales, 1990, 2014; Thompson and Tribble, 2001)

Reference includes the directive ‘see’, as in:

e.g. Integral and non-integral types of citations were further classified into other subcategories (see Thompson, 2001).

Origin indicates the originator of a concept, technique or product, as in the following example.

e.g. Citations were divided into integral and non-integral types (Swales, 1990), and this was further classified into other subcategories (Thompson, 2001).

These subcategories of the integral and non-integral citations were based on a corpus of 16 theses written in two departments at the University of Reading; eight theses from the Department of Agricultural Botany in the applied science domain, and eight theses from the Department of Agricultural and Food Economics in the social science domain. These theses were written by native speaker writers. Theses of Agricultural Botany had non-integral citations (66.5) more than the integral ones

(33.5), whereas theses of Agricultural Economics had integral citations (61.9) more than the non-integral ones (38.1). These findings seem to be in accordance with the general distinction between the hard domain and the soft domain of knowledge. In other words, writers in the soft domain prefer using the integral citation, whereas writers of the hard domain prefer using the non-integral citation (read Hyland, 1999). Writers of Agricultural Botany theses tended to depend on Non-integral Source citation and Non-integral Identification type of citation and Verb controlling. On the other hand, writers of the Agricultural and Food Economics theses tended to depend on Verb controlling, Non-integral Identification and Naming. Though the two groups of theses contained a high percentage of Verb controlling, Agricultural Botany theses had Verb controlling subcategory more than the Agricultural and Food Economics theses. On the other hand, Agricultural and Food Economics theses had Naming integral subcategory more than the Agricultural Botany theses.

The majority of studies related to using Verb controlling revealed the dominance of the Verb controlling over the Naming subcategory in the integral citation. However, Thompson's (2001, 2002) finding seems to be in contrast with the finding of a study by Swales (2014), Jalilifar and Dabbi (2012), and Mansourizadeh and Ahmad (2011). In this later study, expert writers of published articles in the field of chemical engineering tended to use Integral Naming more than Integral Verb controlling with 6.97 % and 6.56%, respectively, whereas novice writers of the unpublished papers in the same study tended to use Verb controlling more than Naming subcategory.

The two classifications of citations by Swales and Thompson were significant in identifying which information belongs to the writer and which information belongs

to the author. However, these classifications did not focus on the type of clauses used in each type of citation and did not present a sufficient description of the citations that have more than one clause. Hence, in the present study, three language metafunctions were used in analysing citations with clause simplexes and citations with clause complexes.

The following subsection presents more discussions related to the functions of citations.

### **2.5.2 Functions of Citations**

The functions of citation and referencing to previous studies is not only limited to establish a background in the introduction, give the source of an idea or attribute a proposition to a specific author/s. Rather, citations are used to make an interpretation of the findings with the purpose of advancing the argumentation of the author to position himself/herself within the previous studies by means of his/her claims and viewpoints (Samraj, 2013; Petric` and Harwood, 2013). The multi-functions of citations were revealed through a mixed method, adopting an in-depth discourse-based interview with a successful L2 postgraduate management student in two assignment writing tasks (a directed task and an open task) in two management modules (Petric` and Harwood, 2013). The findings revealed several functions of citations, including Positioning, Defining, Supporting, Application, Topic Relevance, Disagreement, Agreement, and Acknowledgment.

Though the interview was limited to only one L2 postgraduate student, the discourse-based interview yielded good information about student's familiarity with the functions of citations in her two writing assignments. Thus, conducting more

interviews with more participants from two disciplines who are currently involved in writing their PhD proposals in the present study could present us more insights about students' knowledge on their citation practices and the associated challenges.

The functions of citation in Petric's (2007) study associated getting high grades with varying the functions of citation in 16 master dissertations in the field of gender studies written in English by Second Language writers from 12 countries in Central and Eastern Europe; eight high-graded dissertations and eight low-graded ones at an English-medium university in Central Europe. The exploration of the rhetorical functions led to multiple functions of citations, including attribution, exemplification, further reference, statement of use, application, evaluation, establishing links between sources, and comparing one's own work with other authors' works. Attribution was used to attribute information, a proposition, a term, an activity or knowledge to an author (s) in the form of summarizing, paraphrasing or quoting. The attribution function was the dominant one; such a practice implies that students' aim when using citations in their writings was to exhibit their familiarity with their discipline area.

Although attribution function was used in both sets of dissertations, it was used in low-graded dissertations more than high-graded dissertations, and at the same time writers of the low-rated dissertations avoided using citations of complex and analytical skills. Thus the variety in using citation functions among Second Language writers could lead to the possible correlation between students' use of citations and their academic success.

Students of good grades also used evaluative language while citing, but students of low-rated dissertations lack this feature. This was evidenced in the usage of evaluation citation in the literature review of the high-rated dissertation with 7.12%, whereas it was less used in the literature review of the low-rated dissertations with only 1.40%. These findings motivated the researcher in the present study to explore students' perspectives on using citations; this involved the aspect of evaluation when using citations to write the literature review chapter of their PhD proposals. The following subsection gives us another idea about the varieties in using the linguistic structures of citations.

### **2.5.3 Linguistic Structure of Citations**

Citation linguistic structures are varied depending on the choice of the writer. The tense of the verbs can also vary, depending on the activities used by the author, and based on the interpretation of the author toward the reported findings. These verbs can be accompanied by other elements, such as modifying modal verbs, adverbs, and negations which can affect the evaluative feature of the structure or the evaluative feature of the reporting verb.

The linguistic structures that follow the reporting verbs are also varied. To get a detailed description of these linguistic structures, John's (2012) study was based on the literature review sections of 17 master dissertations in the field of Applied Linguistics written by L2 writers from Far East countries, such as China, Hong Kong, Taiwan, or South East Asia, such as Malaysia and Thailand. These L2 writers were enrolled at a UK university. The examples illustrated in Table 2.1 below were taken from the draft and final versions of the students' dissertations. Based on the data, the integral type of citation has varied linguistic structures which are used with

the reporting verbs and can further influence the stance of the writer toward the cited information.

Although the linguistic structures presented in John's (2012, p. 191) study shed light on a variety of usages of the integral citations, the study is still lacking in terms of limiting the description to only one clause in the integral citations. Citations involve also the non-integral citations which include multiple clauses that are joined paratactically or hypotactically. The relationships between clauses of a citation with a clause complex are interpreted in terms of the logical meanings. Two dimensions are involved in the logical meanings. One dimension is the interdependency or tactic system including parataxis and hypotaxis. Regarding parataxis, it is concerned with the relationship between two independent clauses with an equal status. One clause is initiating, whereas the other clause is continuing. Contrasting with this is hypotaxis, which is a relationship between a dependent clause and its dominant one. The other dimension of logical meanings is the logico-semantic relations of projection and expansion (Eggins, 1994, 2004; Halliday, 1985; Halliday and Matthiessen, 2014). Thus, applying the Systemic Functional Linguistics in the present study can provide us with a diversity of findings due to applying three language metafunctions in analysing the clauses used in the integral and the non-integral citations. Although Swales has never used the SFL in analysing the citations, he reported *‘It all looks fine’* (personal communication, August 10, 2016).

All the patterns of the linguistic structures used in Table 2.2 belong to the integral type of the citations, specifically the *Verb controlling*, as was subcategorized by Thompson (2001, 2002) and Thompson and Tribble (2001). Therefore, the reporting

verbs used in the integral verb controlling represents a significant element that can be used in different tenses and different voices to reveal the writer's stance. Based on the American Psychological Association Publications Manual (2010) guidelines, "verbs are vigorous direct communicators" (p.77). Hence, choosing the appropriate verb in almost all types of writing necessitates a careful use.

Table 2.2

*Linguistic Structural Patterns of the Integral Citations*

No	Linguistic Structure	Example
1	As +X+ verb	As Hervey and Higgins (1992) suggest,...
2	As + X + adverb + verb	However, As Aixela aptly points out,...
3	X + verb + that-clause	Coulthard suggests that...
4	X + verb + noun + that-clause	Nida and Reyburn remind us that...
5	X+ verb + noun phrase	Swain (1985) counter-argues the importance.
6	Noun phrase + be + verb + by + X	The more detailed definition is given by Rost (1990).
7	It + be + verb + by + X + that/	It has been claimed by Granger (1998) that....
8	X + adverb + verb + that-clause	Tsuda (1990) strongly suggests that.....
9	X + adverb + verb	Phillipson (1992) critically analyses.....

(Adapted from John, 2012)

However, there are other elements which can affect the evaluative potential of the reporting verbs. This concept was neglected in the studies that classified reporting verbs into denotation and evaluative potential. Denotation refers to textual, mental, or research activities. On the other hand, the evaluative potential refers to stance that is inherent in the verb itself. This stance can be positive, negative or neutral (Hyland, 1999; Thompson and Ye, 1991). For example, the reporting verb *find* indicates the activity of the cited author as finding something, but there is no inherent evaluation in the verb itself to reveal the author's stance toward the reported findings. The reporting verb *suggest* was also used in John's (2012) study to reveal a neutral stance toward the citation. The reporting verb *claim* is different from the previous two reporting verbs, *find* and *suggest*, in the sense that the verb *claim* has a strong evaluative stance used by the citing writer to express his/her commitment toward the

cited proposition. This reporting verb can be classified, as Hunston (1993) states, as an arguing verb, depending on the context, and is used by the writer to reveal his/her disagreement with the sourced author. The reporting verb *point out* can be used by the citing writer as a strong indicator to reveal the full agreement between the citing writer and the sourced author, where there is no place for disagreement.

Using „*as*” structures and other modifying adverbs influence the linguistic structure of the citation. For example, using the conjunction *as* in the example, *as John (2012) argues*, affects the evaluative stance and quality of the reporting verb. Using the reporting verb *suggest* alone would suggest a neutral stance, whereas using *as* structure implies that the citing writer wishes to be involved in the proposition presented by the cited author. Thus „*as*” structure can have a boosting effect used to increase the writer’s positive stance toward the citation.

Modifying the evaluative feature of the reporting verb can be also achieved by means of using modifying adverbs which carry evaluative features themselves. For example, using the adverb *critically* can change the reporting verb of a neutral stance, such as *analyse*, to another stance to reveal how the writer interprets the sourced author’s neutral activity. Similarly, the reporting verb *suggest* does not have a commitment position toward the reported proposition on the part of the sourced author. However, using the adverb *strongly* with the reporting verb changes the evaluative stance of not only the sourced author but also the citing writer who reveals a positive stance (John, 2012). It can be concluded that using *as* structure, modifying adverbs and modal verbs could probably have an additional evaluative stance on the reporting verb and the whole clause in the different types of

citations. Therefore, in the present study, stance is explored mainly under modality when identifying the interpersonal meanings of the clauses used in citations.

### 2.5.3.1 Metadiscourse

The modifying adverbs and modal verbs can be classified as a metadiscourse which was defined by Hyland (2005, p.37) as

*„the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community““*

Thus, the role of the metadiscourse is to organize texts, reveal the attitude of the writer and engage the readers. Hyland and Tse (2004) distinguished between interactive and interactional metadiscourse. The former is concerned with organizing the text with the purpose of guiding the reader through it, whereas the latter is concerned with engaging the reader in a relationship with the writer in order to direct the reader toward the perspectives of the writer on the propositional content.

An earlier study was conducted by Hyland (1998a) on metadiscourse in 28 research articles in four academic disciplines (Microbiology, Astrophysics, Applied Linguistics, and Marketing) to show how the appropriate use of metadiscourse depends on the rhetorical context. Hyland adopted the metadiscourse taxonomy of Crismore, Markkanen, and Steffensen (1993), which classifies the metadiscourses into textual types and interpersonal types, and these are classified into more specific functions, as follows.

- 1) Textual metadiscourse devices are used to form a coherent and convincing text, depending on the functions of five categories, among them is using evidentials to

indicate the source of the information, such as *according to, Hyland (2000) argues,...*

(2) The other type of metadiscourse taxonomy is the interpersonal metadiscourse, which is used to convey the attitude of the author toward the reported statement, such as certainty, assertiveness, tentativity, doubt, neutrality and uncertainty, and this attitude has been referred to by previous authors (Thompson and Ye, 1991; Hyland, 1999) as a stance. In other words, this type of metadiscourse is mainly interactional and evaluative that is used to indicate the writer's persona, revealing the author's intimacy, commitment, and attitude. This type of metadiscourse includes several subcategories. (a) Hedges are the first subcategory, which are used to reveal the writer's cautious attitude and withholding his/her full commitment toward the statements through using words, such as *perhaps, might, about, it is possible, and possibly*. (b) Emphatics as the second subcategory are used to reveal the writer's certainty when reporting the statement or the proposition by using words, such as *it is clear, clearly, obviously, obvious, in fact, and definitely*. (c) The third subcategory of the interpersonal metadiscourse is the attitude markers which are used to reveal the writer's affective attitude toward the textual information, but this is relatively different from hedges in the sense that they convey more varieties, including obligation, agreement, importance and surprise. Examples of attitude markers include examples, such as *X claims, I agree, and surprisingly*. It seems that metadiscourse devices are significant and effective when used appropriately and in line with the norms and principles of the academic community.

An earlier study was conducted by Hyland (1994) to examine hedging in 22 EAP textbooks intended for L2 students around the world to prepare them for academic

study. Based on the findings, modal verbs occupied the majority of the textbook coverage; nonetheless, only *English for Science* and *Writing up Research* addressed the epistemic usage of the modal verbs, which can be used to reveal writers' attitude of uncertainty toward the reported information. The modal verbs included *will* as the most certain, through *would*, *should*, *may*, and *could* as the most tentative modal verb. However, these textbooks did not include sufficient information about the modal verbs. In addition, the awareness toward using hedges was rarely described in such textbooks.

Boosters are the other devices used to show the power of argument and certainty. According to Hyland and Tse (2004), boosters are linguistic expressions, such as *demonstrate*, *undoubtedly*, *it is clear that*, which are effective in strengthening the illocutionary force of speech acts (Holmes, 1982). Obviously, the function of boosters is implied in emphasizing certainty toward a proposition or confidence in an assertion (Holmes, 1988; Crismore *et al.*, 1993) or ending the debate or the possible alternative argument by asserting the writer's position (Hyland, 1998a; Gillaerts and Van de Velde, 2010). As Hyland (2005) argues, "by closing down possible alternatives, boosters emphasize certainty and construct rapport by marking involvement with the topic and solidarity with an audience, taking a joint position against other voices" (p. 53). In other words, hedges and boosters are metadiscourse linguistic expressions adopted by the writer in order to either express uncertainty or certainty toward the propositional content.

Thus evaluating the cited information helps in constructing the writer's argument successfully. That is to say, writers usually attempt to establish a recognizable social

world by means of rhetorical options which enable them to create interpersonal negotiations and make balanced claims for the originality, significance, and plausibility of their studies (Hyland, 2005). Within the citations, situating one's research in the academic community and indicating gaps in previous studies is achieved by means of the reporting verbs (Thompson and Ye, 1991; Thomas and Hawes, 1994; Francis, Hunston, and Manning, 1996; Hyland, 1999; Yang, 2013). Other devices, such as polarity, mood adjuncts, and finite modal operators (Halliday, 1985; Eggins, 1994) can also be used to carry an evaluative stance, attitude, commitment or certainty on the part of the citing writer toward the citations.

In the present study, modality was examined in the clauses of the citations used in the literature review of Applied Linguistics and Information Technology. Under modality, both modalisation and modulation were used to reveal certainty, usuality, obligation and inclination. Each one of these has a degree ranging from high, through median to low. Hence, the present study presented more comprehensive findings since it involved finite modal operators, mood adjuncts, and comments adjuncts to reveal a variety of attitudes at the interpersonal meanings.

### **2.5.3.2 Evaluative Reporting Verbs**

Reporting verbs, such as the research verbs, textual verbs, and mental ones, are the other devices used to reveal either the citing writer's stance or the cited author's stance toward the citations. For example, in their study on reporting verbs and the distinction between the Author Acts and the Writer Acts, Thompson and Ye (1991) argue that when the author's act is absent (Author non-acts), the writer can comment

on this absence as evaluative, revealing indirect writer's stance, as in the following example.

e.g. However, the researcher did not specifically compare the results of the two groups.

Reporting verbs of textual and mental acts are usually used in negated forms which imply criticism. Thus, negations and using modal verbs are also used mostly and significantly in reporting when the Writer act is raised to reveal the writer's evaluative stance. Only few cases in which the reporting verb of the Author act is used are employed with a modal verb in citations. In agentless passives and impersonal structures, using modal verbs is an indication that the writer is the agent.

e.g. Hosenfeld's theory *may be characterized* as psycholinguistic (Writer act).

e.g. *It must be admitted*.....(impersonal, self-reporting)

Using modality with the reporting verbs of the Author act implies two concepts: politeness and pride. It implies that the author's ideas are not reported clearly or the inability of the writer to comprehend the author's perspective. In addition, when using a modal verb with an obligation, it implies that the author was not in control of his/her work; therefore, a modal verb with a reporting verb would be classified as the Writer act rather than the Author act (Thompson and Ye, 1991).

However, very few studies explored the effect of modifying adverbs, modal verbs, and negations on the evaluative feature of the reporting verbs in citations. In this regard, Hu and Wang (2014) suggested examining citations through a functional theory in social context (Halliday and Martin, 1993). Hence, the researcher in the present study addresses the citations under three language metafunctions. In addition,

the majority of the studies conducted in the field of citation practices and reporting verbs justify students' less use of certain expressions to their reluctance to evaluate other researchers' work. Therefore, conducting retrospective interviews with the EFL PhD Arab postgraduates could shed more light on the reasons behind their performance related to citation practices in writing the literature review chapter of their PhD proposals.

## **2.6 Review of Related Studies**

The following two subsections discuss issues of citation use and reporting verbs. In the first subsection, there is a focus on studies related to the two types of citation and the three subcategories of the integral citation.

### **2.6.1 Citation Patterns**

Varieties do exist in using the two types of citations by Swales (1990) and the different subcategories of the integral and non-integral citation by Thompson (2001) and Thompson and Tribble (2001). For example, Hyland (1999) conducted a study on citations in a corpus of 80 research articles selected randomly from eight disciplines and interviews with expert writers from each discipline. The corpus represented two domains of knowledge: the hard knowledge and the soft knowledge. The corpus was computer searched and a modified version of Thompson and Ye's (1991) taxonomy of reporting verbs was adopted.

The citations varied across the journals of the different disciplines; writers of the soft disciplines used more citations than engineering and physics writers. However, citations in molecular biology were different from other hard domain articles, thus

violating this broad idea about hard and soft disciplines. Table 2.3 demonstrates the percentage of citation types in each discipline.

Table 2.3

*Rank Order of Citation by Discipline*

<b>Rank</b>	<b>Discipline</b>	<b>Av. Per paper</b>	<b>Per 1000 words</b>	<b>Total citations</b>
1	Sociology	104.0	12.5	1,040
2	Marketing	94.9	10.1	949
3	Philosophy	85.2	10.8	852
4	Biology	82.7	15.5	827
5	Applied Linguistics	75.3	10.8	753
6	Electronic Engineering	42.8	8.4	428
7	Mechanical Engineering	27.5	7.3	275
8	Physics	24.8	7.4	248
Total		67.1	10.7	5,372

(Hyland, 1999)

Disciplines of the soft domain such as Sociology, Marketing, Philosophy, and Applied Linguistics included a higher density of citations, whereas disciplines of the hard domain, such as Physics, Mechanical Engineering, and Electronic Engineering, excluding Biology, had a lower density of citations. This reveals the effect of the field on the percentage of citation. However, the background of the writers for these disciplines is not known; therefore, including information about the writers' background, as in the present study, could justify their use of the citations due to the possible effect of the writer's cultural and educational background on using language, particularly citations.

The difference between using the integral form of citation and the non-integral one is in either giving more prominence to the cited author in the former or reducing his/her prominence in the latter. Although Hyland's (1999) classification of the role of the cited author presented three major roles, it seems to be insufficient and leads to inconsistency when employed as a guide for conducting further studies. For example,

the subject‘ role of the cited author can be also an NP‘. In addition, the non-subject‘ role of the cited author does not give us a comprehensive description of all the roles of the cited author used in the integral citation. Table 2.4 presents more information about the percentage of citation in the eight disciplines.

Table 2.4

*Surface Forms of Citations (%)*

Discipline	Non-Integral	Integral	Subject	Non-subject	NP
Biology	90.2	9.8	46.7	43.3	10.0
Electronic Engineering	84.3	15.7	34.2	57.6	8.2
Physics	83.1	16.9	28.6	57.1	14.3
Mechanic Engineering	71.3	28.7	24.9	56.3	18.8
Marketing	70.3	29.7	66.9	23.1	10.0
Applied Linguistics	65.6	34.4	58.9	27.1	14.0
Sociology	64.6	35.4	62.9	21.5	15.6
Philosophy	35.4	64.6	31.8	36.8	31.4
Overall average	67.8	32.2	48.3	32.7	19.0

(Hyland, 1999)

Hence, in the present study, the role of the cited author was examined at the experiential and interpersonal meanings. Under the interpersonal meanings, the cited author has the role of the Subject, Complement, and an Adjunct‘. The subject‘ and complement‘ positions were realized by nominal constituents, whereas the Adjunct‘ position was realized by a prepositional constituent. Under the experiential meanings, the cited author has roles conflated with the Subject‘ and Complement‘ and are associated with the types of the processes. The cited author has also circumstantial roles that are conflated with the Adjunct‘ (Jomaa and Bidin, 2016).

The disciplinary influence in using citations was also evident in Hyland’s study by employing the integral citations with a higher percentage in the disciplines of the soft domain, such as Marketing, Applied Linguistics, Sociology, and Philosophy, whereas the non-integral citations was dominant in the disciplines of the hard domain,

such as Biology, Electronical Engineering, Physics, and Mechanical Engineering. The effect of the field as a register variable on using citations was also showed by Jalilifar and Dabbi's (2012) study that included 65 master dissertations, with some samples of high rated dissertations between 2005 and 2009 by Iranian postgraduate students from three Iranian universities.

The findings revealed a total of 1,113,4 citations indicating the preference of the students to use the integral type of citation with more than one and a half (n=699), compared with 435 non-integral citations. However, in the integral type of citation, the emphasis was on using the Verb controlling subcategory with 64.80 %, followed by Naming subcategory with 27.04 %, whereas the non-citation subcategory represented the lowest percentage with only 8.16%. However, this study was limited only to one discipline represented by Master's Dissertations, but little is known on why Iranian students used the integral and the verb controlling more than the other categories; therefore, conducting interviews with the student writers, as in the present study, could lead to more justification of students' use of citations.

The native language of the writers could be another variable that affects their use of citations as in a study that involved ten English theses and ten Spanish theses of the same sub-fields of computation and computer engineering (Monreal and Salom, 2011). These theses were defended successfully at both University of Glasgow, UK and the University Politecnica de Valencia (UPV), Spain. Swales' (1990) classification of citations and Thompson and Ye (1991) and Hyland's (1999, 2002a) taxonomy of reporting verbs were adopted as frameworks. The ratio of both citation types and the active and passive forms in the two corpora are described in Table 2.5.

Table 2.5

*Forms of Citations and Types of Voice*

<b>Types of Citations and Voice</b>	<b>English Literature Review Chapters</b>	<b>Spanish Literature Review Chapters</b>
Direct quotations	7.70%	0.02%
Integral citations	48.85%	38%
Non-integral citations	43.44%	61.98%
Active forms	84.93%	44%
Passive forms	15.07%	56%

(Adapted from Monreal and Salom, 2011)

Based on the findings demonstrated in Table 2.4, the writers of the English corpus depended heavily on the original wording of the reported source, whereas the writers of the Spanish corpus summarized the reported source before integrating the summary with their writings. Another finding was the contrast in using a high percentage of the integral citations by means of verb-controlling in active forms in the English corpus, thus giving more prominence to the cited author though computing is classified under the hard domain of knowledge. In such a discipline, both non-integral citation type and passive forms of linguistic structures are preferred by expert writers with the purpose of showing more objectivity and impersonality. In contrast, Spanish writers of the Spanish corpus preferred using non-integral citation with passive forms more than the active forms, thus reducing the role of the cited author.

Based on the findings of the previous studies (Jalilifar and Dabbi, 2012; Rowley-Jolivat and Carter Thomas, 2014), the citation practices could be influenced by the writer's mother tongue and its academic, social and cultural contexts other than English, thus leading to ambiguity in the writer's stance toward what has been cited and weakness of his/her argument. The effect of the mother tongue on using citations was illustrated more in the findings of the present study. EFL PhD Arab

postgraduates' use of citations was interpreted through etic perspectives by means of the textual analysis, whereas their citation practices were demonstrated through emic perspectives based on discourse-based interviews with them.

Citing from other references, incorporating these cited sentences into one's own writing, as well as the linguistic requirements of such citation practices could represent a challenge not only for non-native speakers of English but also for native ones (Rowley-Jolivat and Carter Thomas, 2014). Non-native speaker writers of English possibly face a greater difficulty when writing and citing in English because citation in English is far from being straightforward (Rowley-Jolivat and Carter Thomas, 2014). This difficulty was evidenced in a study conducted by Law, Ting, and Jerome (2013) on 169 pre- and 126 post-questionnaires of undergraduate students at the beginning and end of an Academic Reading and Writing course at a Malaysian public university. It was found that 65.68% of the students do not know how to cite. Though the students were provided with information about citation practices, the percentage remained high, 50.79%, at the end of the course.

In the studies conducted by Swales (2014) and Jalilifar and Dabbi (2012), it was pointed out that the subcategory that involves the cited author as the subject represented the highest percentage of the integral type of citation, followed by the subcategory where the author or authors function as a part of the noun phrase. These findings deserve more focus and further details because they contrast with the findings of Mansourizadeh and Ahmed (2011). In this latter study, citation practices were examined in 14 research articles written by five Malaysian expert writers and seven novice Malaysian master student writers, who were at the final year of

research master program with English as the medium of instruction. Both expert writers and novice writers belong to the same discipline of chemical engineering at a Malaysian university. All papers by seven novice student writers were draft versions, which received neither feedback from supervisors nor language help. On the other hand, the five expert writers have published several multi-authored papers in many journals and received their degrees from English-speaking countries.

One of the differences between the expert writers and the novice writers was the density of citation, where it was higher in the papers of the expert writers. In addition, the findings by Mansourizadeh and Ahmad (2011) pointed out the dominance of the non-integral citation in the corpus of expert writers with 211 citations and a percentage of 86.47%, whereas novice writers' use of non-integral citation was 145 and 73.23% though the two corpora by the two groups are classified under the hard domain of knowledge. Another difference was using the integral type of citation with a percentage of 26.76 by the novice writers, whereas it was only 13.52% in the corpus of the expert writers. Obviously, the most distinguished finding was in using the subcategories of the integral citation, where novice writers used Verb controlling more than Naming, with 44 (22.22%) and 9 (4.54%), respectively. On the other hand, expert writers used Naming more than Verb controlling, with 17 (6.97%) and 16 (6.56%), respectively. These findings might reveal the effect of the experience on using citations.

Mansourizadeh and Ahmad (2011) and Jalilifar and Dabbi's (2012) findings showed that Malaysian and Iranian master students as non-native speakers of English tended to use more integral citations, thus giving more prominence to the cited author due to

their limited resources when citing others' works, compared with native speakers and professional experts, who possess lots of linguistic options. This breadth in citation use reflects the complicated issue underlying this procedure, thus making it more challenging for novice writers to cite appropriately. Consequently, Jalilifar and Dabbi (2012) suggested that citation practices should be emphasized more.

The integral type or the non-integral type of citation depends on the discipline's domain of knowledge (Hyland, 1999; Thompson, 2001, 2002). For example, in Swales' (2014) study on 67 biology papers, the number of the non-integral type of citation was more than the integral type of citation with 900 for the former and 327 for the latter. However, the differences in the citation practices seem to be intra-disciplinary related, depending on the writer's expertise, as it was reported in another study by Parkinson (2013), where authors of research articles preferred the non-integral citations, whereas undergraduate students preferred the integral type of citation. This preference for one type of the integral citation rather than the other motivated the researcher in the present study to explore EFL PhD Arab postgraduates' perspectives on using the citation types in their academic writing.

Another study by Samraj (2013) included eight dissertations from biology (ecology) produced as a part of the master program in a large public university in the United States and eight research articles chosen randomly from the journal *Ecology* which are used by students as the model to follow when writing their dissertations. The study was based on genre analysis and conducting interviews with two specialist informants who have experience in supervising theses from the Department of Biology. The student writers' dissertations and the published articles varied in the

density and the types of citations used in each genre. 226 citations were used by the student writers in the master dissertations with 63 integral citations (27.9%) and 163 non-integral citations (72.1%). Similarly, published articles included 34 integral citations (18.6%) and 149 non-integral citations (81.4%). These occurrences of the integral and non-integral citations reflected the preferences of the two groups of writers to use the non-integral citation. This finding seems to be in accordance with Hyland's (1999) findings related to citation practices in the hard domain of knowledge.

Regarding the subcategories of the integral citations, student writers and published articles' writers tended to use Verb-controlling more than Naming, but the student writers had verb-controlling citations with a higher percentage (21.2%) than the writers of the published articles (12.6%). The two groups of writers' preference of the Verb-controlling citations is in line with Swales' (2014) findings, but it contrasts with Mansourizadeh and Ahmad's (2011) findings.

Though in both discussions of the eight biology master dissertations and the eight biology research articles the citations were used predominantly by student writers and published writers to compare the results, these two genres had variations in both forms and functions of citations (Samraj, 2013). In other words, discourse features acceptable in the master dissertations would not be acceptable in research articles (Samraj, 2013) because each genre has its own linguistic manifestations as it is the case with reporting evidentials which have different forms with different functions based on the context and the genre (Yang, 2013).

Thus, the differences in the citation usage between master dissertations and research articles could be attributed to expertise of writers in research writing and genre expectations (Samraj, 2013). This variation in citation practices led the researcher in the present study to consider the type of the genre when comparing it with another genre, whereby only the literature review chapters of PhD theses were analysed because the differences in the types of genres can probably lead to variations in citation practices.

EFL Arab writers were also included in a study by Rabab'ah and Al-Marshadi (2013); five EFL MA theses by Saudi writers were compared with five EFL MA theses by native writers of English at the universities of the United States of America. Swales' (1990) classification and Thompson and Tribble's (2001) classification were employed in their study to analyse the citations and their frequency in the sections of the ten MA theses. The Saudi writers were similar to the non-native Iranian writers of MA of Applied Linguistics in Oskueia and Kuhi's (2014) study in using citations more than their native counterparts. This implies that Saudi writers lack the linguistic competence similar to the Vietnamese postgraduates in Nguyen and Pramoolsook's (2015) study; therefore, they had a difficulty in rephrasing the information or adding their own ideas into their own writings. The Saudi writers were also similar to the performance of the novice writers in Mansourizadeh and Ahmad's (2011) study in using integral verbs more than noun-phrase citations.

Although EFL MA theses belong to the soft domain where the integral citation is preferred, Saudi writers used non-integral citations more than their native

counterparts, whereas the EFL Iranian writers in Gol *et al.*'s (2014) study used the integral citations more than the non-integral ones. The performance of the Saudi writers is in contrast with Hyland's (1999) study in which the integral citation was used more in the research articles of the soft domain, whereas the non-integral citation dominated in the research articles of the hard domain. These contrasts in the findings might be attributed to students' lack of sufficient information on using citations. Rabab'ah and Al-Marshadi (2013) argue that Saudi Arab writers have a difficulty in integral noun-phrase citation which requires writers who have proficiency in restructuring and citing a source correctly. In addition, their citations are characterized of lacking critical analysis and syntheses. Al-Zubaidi (2012) advocates this argument stating that Arab postgraduates in Malaysia lack sufficient bases of academic literacy habits to build upon. Moreover, EFL Arab postgraduates experience serious difficulties regarding dealing with citations (Al-Zubaidi, 2012) or references (Al-Khasawneh, 2010; Al-Zubaidi, 2012).

In a study by Nguyen and Pramoolsook, (2015), it was stated by the three supervisor participants that their supervision concentrates mainly on research issues rather than technical aspects like citations use. In addition, they added that students should be familiar with citations use. However, due to lack of resources in their universities, secondary citations are accepted in TESOL discourse community in Vietnam. In another study by Shi (2012), it was demonstrated that students have challenges in paraphrasing to avoid plagiarism since paraphrasing is a complicated process that depends on the writer's comprehending of the content, using citation, and the rhetorical aspects of citations use in each discipline. Hence, the disciplinary difference in citation use entails the danger of adopting general rules regarding

citations use. The study also clarified that inferential thinking has an effective role when paraphrasing or borrowing source texts. For example, the comparison of the paraphrases achieved by the student writer and the nursing professor demonstrates that paraphrasing is not limited only to restating the original information rather it can reveal the writer's inferential thinking and depicts more content knowledge. On the other hand, L2 writers showed only superficial paraphrasing. This aspect can be attributed to the low understanding of the content of the original text. This reveals the high significance of familiarity with the linguistic and content knowledge in paraphrasing the source texts. In this regard, Pecorari's (2006) explained that by reading a new text, the reader may not realize that an idea, a concept or a fact that is attributed to another text is cited properly and accurately. Hence, the relationship between the original text and the cited text is not direct. Hence, non-native student writers might attempt to use citations based on the style of the sources they read or according to their own perceptions towards using citations. To get more details about students' citational practices, EFL PhD Arab postgraduates were involved in discourse-based interviews in order to explore their perspectives on using citations.

In a more recent study, Swales (2014) attempted to answer several questions; among which is a question related to citation practices. The biology subcorpus which included 37 papers (98,000 words), was chosen from Michigan Corpus of Upper-level Student Papers (MICUSP) over the period from 2007 to 2011, and written by final year undergraduates and graduates in their first three years of graduate study. Based on the findings, the average number of references per paper was 21 and the average number of citations was 33 per paper. The number of citations was 900 non-

integral citations (73%) and 327 integral ones (27%), respectively. It is worth noting here that even with the non-integral citation, there was a further classification of reporting and non-reporting, with this latter as more common. Reporting citations include reporting verbs, whereas non-reporting citations do not include reporting verbs.

However, this latter classification is insufficient because it does not describe the citations with multiple clauses and is not based on a theory that explains how to classify such citations. According to Halliday (1985), Halliday and Martin (1993), and Eggins (2004), only verbal processes, such as *report*, *mention*, *indicate*, *suggest*, *say*, and *demonstrate* and mental processes, such as *believe* and *think* can project in clauses to realize the logico-semantic relationships between two clauses of a clause complex. Hence, in order to get a full explanation that can be best used to describe citations with reporting verbs, the logico-semantic relations were explored in examining citations with clause complexes in the present study.

Within the integral citation, variations exist in the fivefold sub-categorisation of the role of the cited author. The author as the clause subject was 226 citations (70%), followed by the author as part of the noun phrase with 49 citations (15%), followed by the author as the agent with 26 times (8%). The lowest number of the subcategories of the integral citations was represented by the author as an adjunct with 19 citations (6 %), followed by the author in other forms with 7 times only (2 %). Examples of the author's functions in the grammatical types of the integral citation were as follows.

e.g. John (2012) suggests that students vary in their use of citations.  
(Author subject)

e.g. It was suggested by John (2012) that students vary in their use of citations.  
(Author agent)

Examples of the two types of an adjunct included the following examples.

e.g. According to John (2012), students vary in their use of citation types.  
(This subcategory of the integral citation is realized by a prepositional phrase).

e.g. As John (2012) suggests, students vary in their use of citation types (this subcategory of the integral citation is realized by a subordinate clause).

The author's name may be part of a noun phrase either via a possessive or using an agentive structure, as follows, respectively.

e.g. John's (2012) assumption implies teaching students how to use citations.

e.g. The assumption proposed by John (2012) suggests distinguished findings.

The author as the subject category represented the highest percentage, followed by the category where the author functions as part of a noun phrase. This feature of the integral citation is worth studying because it contrasts with the findings of a study conducted by Mansourizadeh and Ahmed (2011). Hyland's study also involved the analysis of the roles of the cited author in the integral citations; three roles were occupied by the cited author: subject, non-subject, and noun phrase, as in Table 2.6.

Table 2.6

*Surface Forms of Citations (%)*

Discipline	Non-integral	Integral	Subject	Non-subject	Noun-phrase
Biology	90.2	9.8	46.7	43.3	10.0
Electr.Eng.	84.3	15.7	34.2	57.6	8.2
Physics	83.1	16.9	28.6	57.1	14.3
Mech.Eng.	71.3	28.7	24.9	56.3	18.8
Marketing	70.3	29.7	66.9	23.1	10.0
App.Ling	56.6	34.4	58.9	27.1	14.0
Sociology	64.6	35.4	62.9	21.5	15.6
Philosophy	35.4	64.6	31.8	36.8	31.4
Averages	67.8	32.2	48.3	32.7	19.0

(Hyland, 1999)

The findings showed differences in these three roles in the research articles of the soft domain and the hard one. Similar to Swales' (2014) classifications, there is inconsistency in these roles since the findings are not based on a particular theory. In other words, the role of the cited author as a Subject can be also in a Noun-phrase position; therefore, a further study is needed to identify the role of the cited author.

It can be summarized that the roles of the cited author in the integral citations of Hyland (1999), Mansourizadeh and Ahmad (2011) and Swales (2014) were insufficient. Hence, in the present study, the three language metafunctions were used in analysing the clauses of the citations which resulted in a diversity of roles assigned to the cited author. These included roles at the interpersonal meanings, roles at the experiential meanings, and roles at the textual meanings (see Jomaa and Bidin, 2016). The following subsection addresses the reporting verbs used in the different types of citations.

### **2.6.2 Reporting Verbs**

Reporting verbs are usually used with the integral citation, and sometimes they may or may not be used with the non-integral citation. These reporting verbs are used to achieve two functions. First, they are used to describe the kind of the research activities. The majority of the classifications in this group agree on three types of denotative verbs, including verbs of research, verbs of discourse and verbs of cognition. Second, they can be used to convey the citing writer's stance toward the reported proposition. In such a case, the writer has several options of attitude, including positive, negative, or neutral. Other classifications revealed other types of stance, such as certainty and tentativity.

These reporting verbs are important in identifying the reporting structure and in attributing the reported information to external sources. Due to their significance, several researchers (Thompson and Ye, 1991; Thomas and Hawes, 1994; Francis *et al.*, 1996; Hyland, 1999; Thompson, 2001, 2002; Lang, 2004; Yang, 2013; Manan and Noor, 2014) have conducted studies on reporting verbs used in different genres of different domains of knowledge. For example, Thompson and Ye (1991) conducted a study on reporting verbs in the introductions of a hundred articles from several fields. The occurrence of each reporting verb ranged from one time, such as the verb *articulate*, *embark*, and *relax* to 36 times for the verb *show*. These reporting verbs were classified into two main headings: denotative and evaluative, as in Figure 2.6. Denotation groups refer mainly to either the *Author Acts* or the *Writer Acts*. Author Acts included three main groups of reporting verbs, classified as textual, mental, and research verbs. First, textual verbs included reporting verbs, such as *challenge*, *underline*, *point out*, *write*, *term*, *state*, *deny*, *name*, which refer to the process of obligatory verbal expressions.

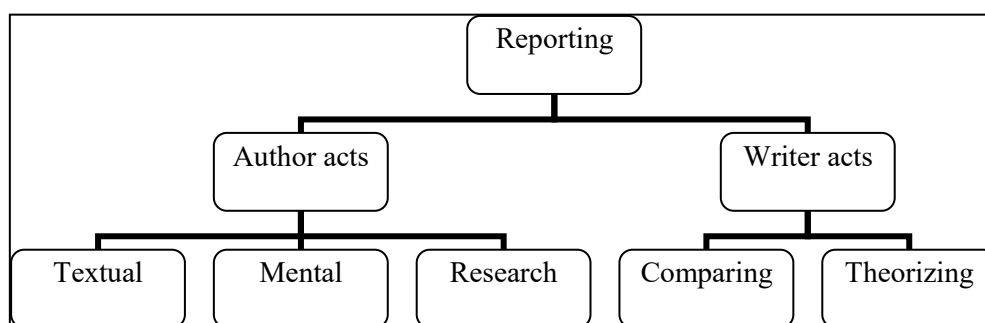


Figure 2.6. Denotative reporting verbs (Thompson and Ye, 1991)

Second, mental verbs refer to mental processes expressed in the author's text, such as *believe*, *think*, *prefer*, *focus on*, *consider*. Third, research verbs refer to mental or physical processes, such as *measure*, *obtain*, *find*, *quantify*, *calculate*. Another small

group of the reporting verbs is attributed to the reporting writer, thus it was classified under the Writer acts, as demonstrated in the example below.

e.g. Swales' (2014) finding on verb controlling subcategory *contradicts* with Mansourazidah and Ahmad's (2001) findings.

It seems that the verb „*contradict*” belongs to the reporting writer Writer acts rather than the reported author Author acts. This classification of the reporting verbs under the Writer acts was sub-divided into two other sub-groups, including comparing and theorizing. However, the division between the Author Acts and the Writer Acts is not clear-cut, and sometimes it is misleading because theorizing verbs of the Writer Acts can be used to describe the Author Acts. In addition, verbs of the Author acts can be interpreted as Writer Acts if they are used in the negation form or used with a modal verb. This distinction between Author Acts and Writer Acts is very important in the field of evaluation.

e.g. Swales' (1990) division of citation practices *exemplifies* the citation practices (Writer Acts).

e.g. This has been *exemplified* by Swales (1990) in his division of the citation practices (Author Acts).

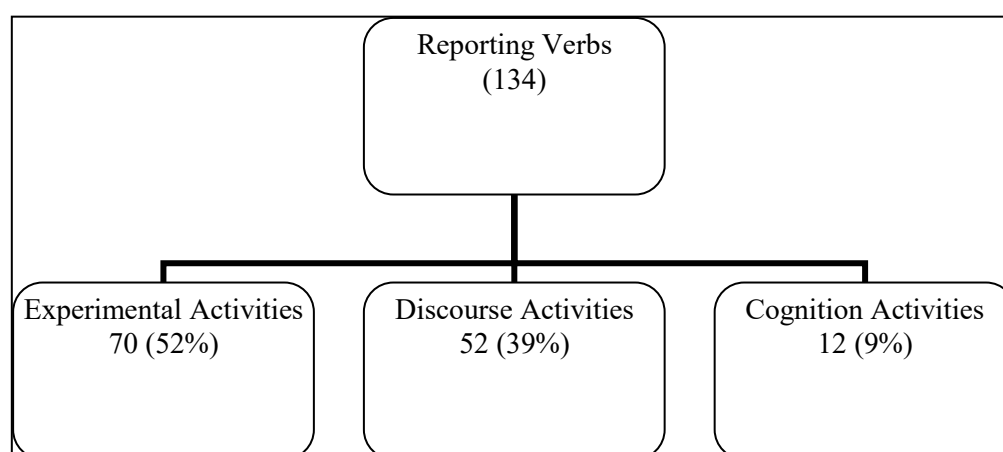
The other heading of the reporting verbs is associated with the evaluative features used by the citing writer to reveal either his/her stance or the cited author's stance toward the cited information. However, the categories are not always easy to be applied. Consequently, other grammatical features, such as tense and negation could have an effect in altering the evaluative potential of these reporting verbs. Though the several benefits derived from the findings of their study, Thompson and Ye (1991) stated the sample is too small to draw many definite conclusions as regards frequency (p.367). The sample included only the introductions of 100 papers from

journals in diverse fields, including for example applied linguistics, geology, public administration, engineering, and veterinary science. There may be other fields, but they were not mentioned. The types of papers were not described. In addition, there was no indication of the date of publishing these papers, and the backgrounds of the authors of these papers are not known.

Regarding the findings of Thompson and Ye (1991), over 400 verbs were identified, but the complete list of the reporting verbs was not showed in the findings. Therefore, when using a software in a corpus analysis to identify the reporting verbs, some verbs might not appear. This problem was faced by Hyland (1999) in using a computer when searching a corpus for canonical citation forms, such as a date in brackets, a number in squared brackets, and Latinate references to other citations, where a number of the citations were left unaccounted. More importantly, the findings were generally described. In other words, there was no indication of the frequency and the percentage of the reporting verbs used in each group or heading.

The interaction between denotative and evaluative headings is very complex and not always \_‘clear-cut as might be hoped for analytical purposes‘‘ (p.369). Thus, non-native speaker writers could be challenged with using reporting verbs due to the implied evaluative feature of some reporting verbs. Additionally, they may misuse these reporting verbs or express a neutral stance as in a study by Jalilifar and Dabbi (2012) who showed that Iranian postgraduate students in the their master dissertations used non-factive reporting verbs (neutral stance) with a high frequency, followed by factive verbs, whereas counter-factive verbs were less used.

Similarly, another study on reporting verbs in medical journal articles was conducted by Thomas and Hawes (1994). The corpus depended on randomly choosing 11 research articles on psychosomatic medicine. 134 reporting structures were identified and three categories of reporting verbs were classified based on the highest percentage of each category: (a) Real-World or Experimental Activity Verbs, (b) Discourse Activity Verbs, and (c) Cognition Activity Verbs. Similar to the reporting verbs in Thompson and Ye (1991), the reporting verbs can overlap and a level of ambiguity may occur. Thus it becomes challenging to assign a certain reporting verb to one of the three groups. Another similarity in terms of the denotation aspect is the classification of the three categories in both studies. Each category in Thomas and Hawes' (1994) seems to coincide with one in Thompson and Ye (1991). For example, Discourse Activity Verbs category coincides with Textual Verbs, Cognition Activity Verbs category coincides with Mental Verb category and Real-World/Experimental Activity Verbs category coincides with Research Verbs. Figure 2.7 represents the categories used in Thomas and Hawes' (1994) study.



*Figure 2.7. Denotative reporting verbs (Thomas and Hawes, 1994)*

However, Thomas and Hawes' (1994) study is different from Thompson and Ye's (1991) in terms of the variety and number of articles, where reporting verbs were explored in all the rhetorical sections of the journal articles except the method section. Similar to the study of Thompson and Ye (1991), the authors' backgrounds of the chosen articles are not known, and there is no indication of the year of publishing these articles.

Another study on reporting verbs was conducted by Yang (2013), adopting Francis, Hunston and Manning's (1996, pp.97-101) classification of *verb that clause*. Reporting verbs were classified into three groups: ARGUE group, THINK group, and SHOW and FIND group. ARGUE group (language activity) includes verbs of writing and other forms of communication, such as *argue, suggest, point out, write, conclude, claim, add, maintain, propose, imply* and *mention*. THINK group (thinking) includes verbs of thinking, belief, understanding, hoping, fearing, such as *think, assume, feel, hold* and *believe*. SHOW and FIND group (visual channel) includes verbs that indicate facts, a situation or with coming to know, such as *show, demonstrate, reveal, find, observe, discover* and *indicate*.

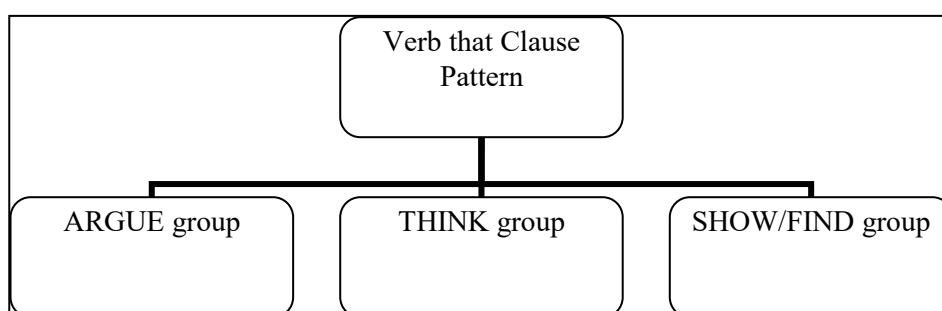


Figure 2.8. Verb (reporting verbs) that clause pattern (adapted from Francis et al., 1996)

The classification of these verbs in the three categories is context-dependent; the context plays a great a role in determining the appropriate category of each verb. For example, the verb *observe* in the Show and Find group refers to the visual evidence with the meaning of noticing, and it can be in the Argue group when it refers to the language activity. Thus, the categorization of these reporting verbs is similar to the studies conducted by Thompson and Ye (1990), Thomas and Hawes (1994) and Hyland (1999) in terms of overlapping. Another similarity is in the grouping of the categories. For example, ARGUE group is parallel to the Textual group and Discourse group. THINK group is parallel to the Mental and Cognition group. SHOW and FIND group is parallel to the Research group. In spite of the similarities and overlapping of these reporting verbs, verbs of different categories may imply varied commitment and certainty. For example, verbs in the *Show and Find* group represent a higher certainty since the verbs in this group are always factive (Yang, 2013).

Yang's (2013) study included 50 English research articles of Applied Linguistics. The articles were chosen during the period from 2004 to 2008. The reason behind choosing articles that belong to the same period is because genres are stable at a certain period of time, and at the same time, they undergo a state of constant evolution. Therefore, the genre of RAs may change overtime. The findings of the study revealed that ARGUE group was used dominantly with 61.1%, using mainly *argue* (70 times) *point out* (43 times), *suggest* (40 times), and *claim* (37 times). This was followed by FIND and SHOW group with 35.1%, using mainly *show* (43 times), *note* (20 times), *reveal* (17 times), *observe* (13 times), and *indicate* (10 times),

whereas THINK group occupied the least percentage with only 3.8%, using *assume* (10 times), *think* (3 times), and *hold* (3 times).

The findings of Yang (2013) and Hyland (1999) seem to contrast with the findings of Manan and Noor (2014) because in the latter study, Malaysian master students used reporting verbs from research acts category with the highest percentage (44.8%), followed by cognition acts (30.2%), and the lowest percentage was occupied by the discourse act category with only 25.0%. Using reporting verbs in Manan and Noor (2014) contradicts the conventions of the soft domain in Hyland's (1999) study because genres of the soft domain usually contain Argue verbs with the highest percentage, followed by Research verbs, whereas Think verbs represent the lowest group. However, the classification of the reporting verbs adopted by Francis *et al.* (1996) is limited to only *Verb that pattern*, whereas the aim of the researcher in the present study was to identify all the processes *\_verbs\_* used in citations with clause simplexes as well as clause complexes. Processes that are used with *that pattern* in the present study were addressed differently through the logico-semantic relations in citations with clause complexes. Hyland (1999)'s study on using reporting verbs in a corpus of 80 research articles depended on a modified version of Thompson and Ye's (1991) taxonomy of reporting verbs. Over 400 different verbs were used in the citations, though half of these verbs occurred only once. Table 2.6 presents a description of the reporting structures used across the different disciplines.

Based on the findings presented in Table 2.7 below, philosophy articles contained the highest percentage of reporting verbs, whereas physics contained the least percentage. Disciplinary variations were also clear in the density of reporting

structures and forms of the verbs. The highest frequent verbs were *say* and *think* with 80% in philosophy, *use* with 70% in electronics, *report* with 55% in biology, and *examine* with 53% in applied linguistics. The verbs, *argue* 100%, *suggest* 82%, and *study* 70%, occurred mostly in social sciences and humanities, whereas the verbs, *report* 82%, *describe* 70%, and *show* 55%, occurred mainly in the articles of engineering and science. These variations in the frequency and percentage show the disciplinary influences on using the reporting verbs.

Table 2.7

*Reporting Forms in Citations*

Discipline	Per paper	% of citations	Most frequent forms
Philosophy	57.1	67.0%	Say, suggest, argue, claim, point out, propose,
Sociology	43.6	42.0%	Argue, suggest, describe, note, analyse, discuss
App./Ling.	33.4	44.4%	Suggest, argue, show, explain, find, point out
Marketing	32.7	34.5%	Suggest, argue, demonstrate, propose, show
Biology	26.2	32.7%	Describe, find, report, show, suggest, observe
Electro/Eng.	17.4	40.6%	Propose, use, describe, show, publish
Mechan/Eng.	11.7	42.5%	Describe, show, report, discuss,
Physics	6.6	27.0%	Develop, report, study
Averages	28.6	42.6%	Suggest, argue, find, show, describe, propose,

(Adapted from Hyland, 1999)

Hyland (1999) reclassified Thompson and Ye's (1991) classification into three denotative categories according to the type of the activity: Research (real-world) Acts, Cognition Acts, and Discourse Acts. Research (real-world) Acts are used in either findings statements, such as *observe*, *discover*, *notice* and *show* or procedures, such as *explore*, *assay*, *calculate*, and *analyse*. Cognition Acts refer to mental activities and processes, such as *view*, *suspect*, *conceptualize* and *believe*. Discourse Acts refer to verbal expressions, such as *state*, *hypothesize*, *discuss*, and *ascribe*. The findings of the denotative categories of the reporting verbs in Hyland's (1999) study follow the traditional distinction between hard and soft disciplines. Discourse acts of

reporting verbs were used mostly in the soft discipline, represented by articles of philosophy, sociology, marketing, and applied linguistics, whereas Research acts of reporting verbs were used mostly in the science papers of engineering. Table 2.8 clarifies Hyland's (1999) findings related to the reporting verbs.

Table 2.8

<i>Classification of Reporting Verbs (%)</i>		
<b>Denotation</b>	<b>Hard Discipline</b>	<b>Soft Discipline</b>
Research	50.3	29.1
Cognition	4.47	9.85
Discourse	45.2	61.57
Evaluation	Hard Discipline	Soft Discipline
Factive	21.3	17.82
Counter-factive	0.0	1.6
Non-factive	78.7	79.8
Author positive	10.5	30.62
Author neutral	71	42.55
Author tentative	18.3	22.2
Author critical	0.7	4.6

(Adapted from Hyland, 1999)

The distinction in using reporting verbs in the classification of the two domains was also revealed by Thompson (2001, 2002) in 16 theses of Agricultural Botany and Agricultural and Food Economics. The Agricultural and Food Economics theses contained more varieties of the reporting verbs (171), compared with 99 reporting verbs in the Agricultural Botany theses. The reporting verbs „*rport*“ (12.6%), *find*“ (12.3%) and *show* (10%)“ dominated the theses of the Agricultural Botany, whereas the reporting verbs *use/employ* (7.2%), *find* (6.7%), and *suggest* (5.1%)“ dominated theses of the Agricultural Economics.

On the other hand, the least common reporting verbs were *propose* and *discuss*“ in the Agricultural Botany theses and „*rport*“ and *refer*“ in the Agricultural Economics theses. The studies on the reporting verbs involved a comparison

between genre of the hard domain and the genre of the soft one. Therefore, in the present study, the data also involved a comparison between the literature review chapters of the soft domain and the literature review chapters of the hard domain. What distinguishes the present study is the writers of the theses; all of them are EFL PhD Arab postgraduates whose mother tongue is Arabic. This could present a clear insight of their use of citations due to the possible effect of their L1 on their use of citations in L2 academic writing.

The writers' native language probably has influences on their use of citations as demonstrated in a study conducted by Rowley-Jolivet and Carter-Thomas (2014) on 40 prepublication uncorrected drafts of articles written in English by expert French specialized in engineering, science and computational linguistics. It was found that using reporting verbs and other issues related to attribution, stance and attitude represented a problem for expert French writers of English.

The use of reporting verbs by French writers of English was limited in number and less than reporting verbs used by native speakers of English. This could be attributed to French writers' unawareness of the English structures used for reporting, insufficient mastery of English and/or the influence of the French language which may have other forms of citation, and writers of this language (French) have carried the feature of these forms of their native language into their English academic writing. Among the structures used by the French writers of English, which could be responsible for the low use of reporting verbs, were the initial discourse framing devices, 'introductory adverbials', such as *according to*. Another possible reason for the scarcity of reporting verbs is because the French

writers of English do not position themselves distinctly as native speakers of English.

This latter aspect is similar to the Malaysian Master students of English Second Language programs at UKM, where Manan and Noor (2014) found that these students try to be natural, neither supporting nor opposing other researchers' claims. Thus, students reported only what other researchers found without critical thinking or synthesizing others findings into their own writings, compared with writers of health science RAs who go beyond describing the data (Parkinson, 2013).

Malaysian master students in Manan and Noor's study also underused reporting verbs related to discourse acts with 25.0 %, and cognition (mental) acts verbs with 30.2%, due to their limited vocabulary in these subcategories. On the other hand, they overused reporting verbs related to research acts, with a percentage of 44.8% though the corpus (English Language Studies) is classified under the soft domain of knowledge, and the members of such academic community prefer using discourse verbs rather than research ones.

The percentage used by the expert French writers of English demonstrates the effect of the native language, where the performance of the French writers of English stands between the two percentages of L1 and L2, but it was nearer to L1 in terms of lexical varieties and frequency of reporting verbs. Such an issue could meet the assumption of the author/s regarding the effect of the first language (French language) on the citation practices of French writers of English. Thus,

the effect of the French language on French writers of English could result in ambiguity in adopting a stance and the degree of commitment toward the cited information, leading to weakness of the rhetorical efficacy and ambiguity of the argumentation (Rowley-Jolivet and Carter-Thomas, 2014). The effect of L1, specifically Arabic language, on L2 (English language) was also reported in previous studies (Thompson-panos and Thomas-ruzic, 1983; Zobl, 1980). There is a kind of similarity between Arabic and English in terms of the relative clause formation. Due to this similarity between their L1 and English, Arab learners transfer their L1 strategy to English. This could result in using more than one clause in a sentence.

The effect of language on reporting verbs was also illustrated in a study that included 10 English theses and 10 Spanish theses of the same sub-fields of computation and computer engineering (Monreal and Salom, 2011). Thompson and Ye (1991) and Hyland's (1999, 2002a) taxonomy of reporting verbs were adopted as frameworks. English writers used 143 different reporting verbs in 932 concurrences in the LR chapters of the English corpus, with the verb *state* as the most common reporting verb, followed by *suggest*. The three reporting verbs *present*, *note*, and *argue* occurred with a similar frequency. A high presence of verbs related to textual processes existed in the data, but mental verbs, such as *assume*, *view* and *believe* were less used. On the other hand, 110 different reporting verbs and 464 occurrences of these verbs were used by Spanish writers.

The English writers depended on greater varieties of reporting verbs, whereas the Spanish writers adopted only a very limited range of lexical reporting verbs.

What is common among the English writers and the Spanish ones was that the majority of the used reporting verbs belonged to textual and research processes. Consequently, about 50 % of all the reporting verbs used in both corpora presented the information objectively, without having personal interpretation on the part of the writers, thus contributing to the impartial reporting style in the field of academic writing. In the two corpora, the author's reported attitude was mainly neutral. In addition, tentativeness was expressed by means of reporting verbs that are classified as hedges. Using hedges instead of direct criticizing was used in the Spanish corpus because criticizing and challenging other's works and findings were avoided.

However, the majority of the previous studies focused only on three categories of reporting verbs, such as textual (discourse) verbs, research verbs, and cognition (mental) verbs (Thompson and Ye, 1991; Thomas and Hawes, 1994; Francis *et al*, 1996; Hyland, 1999). The Transitivity System that is adopted in the present study involved, besides mental, verbal, and material, other processes, such as relational, behavioural, and existential. Hence, the findings could present more comprehensive details about the verbs used in citations as well as the roles of the cited author. Table 2.9 summarizes the previous studies related to citations use.

Table 2.9  
Summary of Previous Studies

Author/Year	Field and Sampling	Findings	Limitations
Swales, (1990, 2014)	Citation analysis based on applied linguistic perspectives	Integral & non-integral citation. Reporting & Non-reporting. Author functions as a subject, an agent, an adjunct, in NP, and others.	Did not consider the type of clause in each citation. Conflicting findings related to the cited author.
Thompson and Ye (1991)	Reporting verbs in the introductions of 100 papers in diverse fields.	Denotative reporting verbs were classified into Author act (Textual, Mental, and Research) and Writer acts (Comparing and Theorizing), whereas evaluative reporting verbs were classified into writer's stance, author's stance, and writer's interpretation.	The data was small. The study did not consider the effect of other constituents on the evaluative feature of the reporting verbs.
Thompson (2001, 2002)	16 theses by native speakers in Applied Science and Social science.	Integral citation was subcategorized into Verb controlling, Naming, and Non-citation. Non-integral citation was subcategorized into Source, Identification, Reference, and Origin.	The subcategories did not consider the type of clause in each citation.
Francis, et al. (1996)		Denotative reporting verbs similar to the previous two studies were found. Argue group, Think group, and Find and Show group.	The findings were limited to only denotative reporting verbs that come with <i>Verb</i> that clause.
Hyland (1999)	80 research articles in eight disciplines were chosen randomly. Interviewing expert writers informants	Research verbs, Cognition verbs, and discourse verbs. The evaluative reporting verbs were classified into Writer's stance with three stances, whereas the Author's stance is four. The cited author functions in a subject position, in a non-subject position, and in an NP.	The study did not focus on modifying adverbs and modal verbs, which affects the evaluative feature of the reporting verbs. The classification of reporting verbs and cited author is not based on a theory.

Table 2.9 continued

Rabab'ah and Al-Marshadi (2013)	Citations in 5 Master EFL theses by EFL Arab (Saudi) learners and 5 Master EFL theses by native speakers of English. Adopting Swales' (1990) categorization.	Non-native English writers used more integral-verb and non-integral citations more than the native English writers. Arab EFL learners lack writing and research skills needed to use all citations types.	Adopting Swales' (1990) classifications. Limited only to five Master theses by Saudi Arab learners and native speakers of English.
Rowley-Jolivet and Carter-Thomas (2014)	Citations in 40 RAs in English by French writers in engineering, science and computational linguistics, 40 published RAs by English writers, and 40 published RAs in French by French writers. The concordance AntConc 3.2.1 was used for quantitative searches.	French writers of English imported certain features from French which resulted in ambiguity in stance. Issues related to attribution and stance were problematic for the French writers.	Lack of comparability of genres In terms of language (French and English) and publication (40-prepublication uncorrected drafts and other two published corpora)
Manan and Noor (2014)	Six ESL master dissertations by Malaysian students. Adopting Hyland's (1999) taxonomy of only the denotative reporting verbs.	Research verbs were used more than the other two categories, followed by mental verbs, whereas textual verbs occupied the lowest number of frequencies.	Only 6 dissertations in ESL program only Malaysian master students only Denotative reporting verbs only Contrast in findings: Research, Mental and textual.
Nguyen and Pramoolsook, (2015)	The introductions of 24 electronic TESOL master's theses written Vietnamese students in three universities providing this master's program. Thompson and Tribble's (2001, pp. 95-96) framework was adopted. For the reporting verbs, Hyland's (2002) insightful classification of reporting verbs was selected to study the process categories of the reporting verbs.	Citation types were first searched on the Antconc concordance with the use of the Regular Expressions (Regex) which were written for both the conventional and "invented" citing ways. <i>Verb controlling</i> and <i>Source</i> were the two most dominantly used functions in integral and non-integral citations in this corpus. This study also found the separate and listing nature, instead of an argumentative style of citing previous studies by these thesis writers. This strategy tended to be ineffective. Finally, the findings on the reporting verbs used in these introductions showed the most frequent use of <i>Discourse</i> reporting verbs.	Thompson and Tribble's (2001) classification of citations did not focus on the type of clause used in each citation. Hyland's (1999) taxonomy of the reporting verbs did not consider modal verbs and adverbs that can affect the evaluative nature of the reporting verbs.

Although the objectives in the present study is not to compare the EFL postgraduate students' citation performance of L1 with their citation performance in L2, the findings of the present study could tell us how EFL postgraduate students, who share the same mother tongue (Arabic Language), use citations practices in academic writing. Their possible differences and/or similarities in using citation practices and reporting verbs could tell us about the possible effect of EFL postgraduate students' mother tongue on their performance. This was illustrated during conducting retrospective interviews with the EFL Arab postgraduate students.

## 2.7 Conceptual Framework

In analyzing the clauses of the citations in the literature review chapters of 20 PhD theses of Applied Linguistics and Information Technology by EFL Arab students at Universiti Utara Malaysia, the researcher adopted the genre analysis within the textual approach. Under the genre analysis, two theories were adopted: *Systemic Functional Linguistics* and *New Rhetoric Studies*. The three language metafunctions: interpersonal, ideational and textual in the Systemic Functional Linguistics were adopted in understanding the lexico-grammatical analysis of the clauses used in the citations.

Figure 2.9 below summarizes the conceptual framework adopted in analysing citations uses and perceptions in the present study. The ‘(L)exicogrammatical text analysis is an important tool to be used in addressing many problems in a community in different spheres such as education, healthcare, administration, and commerce’ (Halliday and Matthiessen, 2014, P.54).

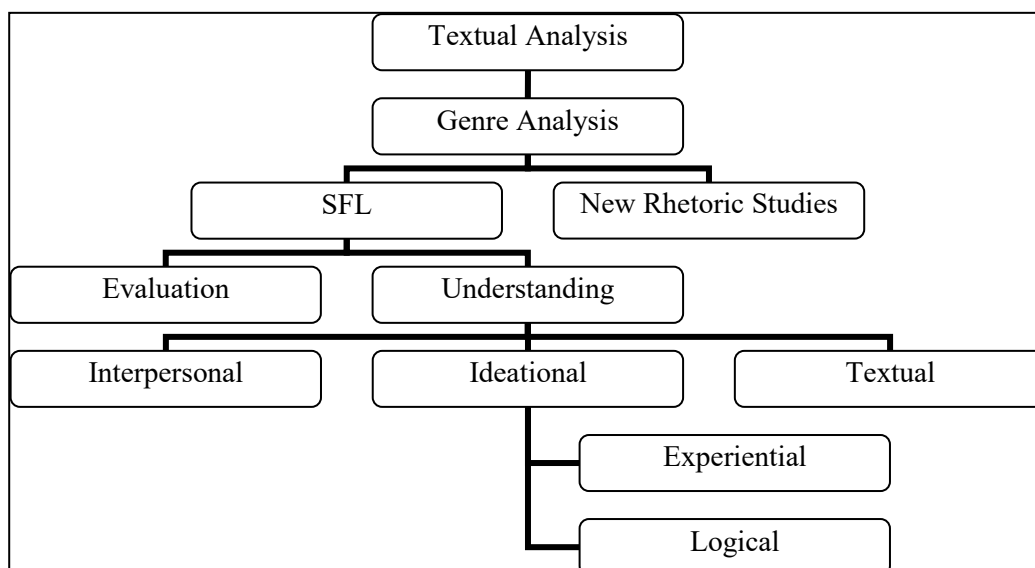


Figure 2.9 Conceptual framework of the present study (adapted from Hyland, 2009b; Hyon, 1996)

As for evaluation, it was used to evaluate the use of the citations used in the literature review of 20 PhD theses in Applied Linguistics and Information Technology. Regarding these two aspects, Halliday (1985) argues:

*‘In any piece of discourse analysis, there are always two possible levels of achievement to aim at. One is a contribution to the **understanding** of the text: the linguistic analysis enables one to show how, and why, the text means what it does. In the process, they are likely to be revealed multiple meanings, alternatives, ambiguities, metaphors and so on. This is the lower of the two levels; it is one that should always be attainable provided the analysis is such as to relate the text to general features of the language-provided it is based on a grammar, in other words.’*

*‘The higher level of achievement is a contribution to the **evaluation** of the text: the linguistic analysis may enable one to say why the text is, or is not, an effective text for its own purposes- in what respects it succeeds and in what respects it fails, or is less successful. This goal is very much harder to attain. It assumes and interpretation not only of the environment of the text, its „context of situation“ and „context of culture“; but also of how the linguistic features of a text relate systematically to the features of its environment, including the intentions of those involved in its production.’ (pp.xv-xvi)*

In adopting the Systemic Functional Linguistics to analyse the clauses of the citations used in the literature review chapters of the PhD theses, the focus is on

the lexico-grammatical patterns: through the words and structures used in the clauses of the citations. The lexico-grammatical analysis involves the three language metafunctions: Ideational, Interpersonal, and Textual that are associated with the three register variables which are Field, Tenor, and Mode, respectively. (Halliday and Martin, 1993; Eggins, 2004, Halliday and Matthiessen, 2014). These three language metafunctions are explored in the present study through understanding the lexico-grammatical analysis of the clause used in each citation. The interpersonal metafunction is explored in research objective one. The ideational metafunction is described in research objective two, and the textual metafunction is identified in research objective three. Research objective four is concerned with the other aspect of SFL which is making an evaluation of the citation use based on the lexico-grammatical analyses in objectives one, two, and three.

The essential function of language is to make sense of humans' experience and act out their social relations. In other words, language provides us with a theory of human experience that is called ideational metafunction which is called language as reflection. Ideational metafunction is composed of two components: experiential and logical.

While using language, our personal and social relations with other people are enacted. Hence, (T)he clause is the central processing unit in the lexicogrammar which represents not only the process of doing, happening, saying, being, having, or sensing but also a proposition to inform, question or express the speaker's attitude towards the addressee or the event. This is called

interpersonal metafunction which is both personal and interactive to suggest ‘language as action’ (Halliday and Matthiessen, 2014, pp.10-30). Thus, every message is about something to construct experience and address someone to enact the interpersonal relations.

These two metafunctions are communicated through another facilitating function that builds up a sequence of discourse, organizes the flow of the discourse, and creates continuity and cohesion. This is called textual metafunction. The term ‘metafunction’ was used instead of function in order to suggest that function is an essential inherent component of the overall theory. In this regard, the clause can reveal three distinct types of meanings: clause as a message, clause as an exchange and clause as representation. Each strand of meaning is construed through the configuration of specific functions. These three kinds of meanings are illustrated in Table 2.10

Table 2.10

*Three Lines of Meaning in the Clause*

Metafunction	Clause as.	System	Structure
Textual	Message	Theme	Theme ^ Rheme
Interpersonal	Exchange	Mood	Mood[Subject+ Finite]+ Residue[ predicator+ (Complement) (+Adjunct)]
Experiential	representation	Transitivity	Process+ participant(s) (+circumstance), e.g. Process+ Actor+ Goal

(adapted from Halliday and Matthiessen, 2014)

Regarding research objective five, the New Rhetoric Studies was adopted to conduct Discourse-Based Interviews (DBIs) (Odell and Goswami, 1982; Odell, Goswami, and Herrington, 1983) with EFL PhD Arab postgraduates of Applied Linguistics and Information Technology at Universiti Utara Malaysia in order to retrospect the challenges in citing the information from the original sources and integrating it in the literature review chapter of their PhD proposals. The interviews also involved PhD supervisors of Applied Linguistics and Information Technology in order to enrich the data with their perspectives on EFL PhD Arab postgraduates' use of citations in writing the literature review chapter of their PhD proposals.

## **2.8 Summary of the Chapter**

In brief, chapter two reviews issues related to academic writing, namely approaches and perspectives on analysing academic discourses in general and analysing genres in specific. The other issue is associated with citation types, functions of citations and linguistic structures of citations. Then, chapter two concludes with presenting the most relevant studies on citation practices and reporting verbs in academic writing. Finally, it presents the conceptual framework that is adopted in the present study.

## CHAPTER THREE METHODOLOGY

### 3.1 Introduction

Chapter three introduces the qualitative research design that was adopted in the present study, as well as the setting, sampling, data collection procedure, and data analysis. A pilot study and the initial findings were also included. Chapter three also involved the issue of trustworthiness, improvements in the data collection, as well as the ethical and legal issues, and stages of conducting the study.

### 3.2 Research Design

Within the context of the qualitative approach, the *Systemic Functional Linguistics* as a social theory of analysing genre was adopted in understanding and evaluating EFL Arab postgraduates' use of citations in academic writing. Understanding citations involved the lexico-grammatical analysis of the clauses used in the citations in the literature review chapter of PhD theses by EFL Arab postgraduates at UUM. As Eggins (2004) suggests, the lexico-grammar is the basis for the linguistic analysis. The evaluation involved depending on the linguistic analysis of the clauses used in the citations in order to determine to what extent the use of the citations was effective and appropriate. Besides the SFL, the *New Rhetoric studies* was adopted in conducting interviews with the EFL PhD Arab postgraduates of Information Technology and Applied Linguistics in order to enrich the data with their perceptions and the perspectives of PhD supervisors on EFL Arab postgraduates' use of citation in writing the literature review chapter of their PhD proposals. Thus, the following research questions were addressed:

- 1- How are the language metafunctions realised in the clauses of the citations in the literature review chapter of EFL Arab postgraduates' PhD theses?
- 2- What are challenges faced by EFL PhD Arab postgraduates in the citation practices when writing the literature review chapter of their PhD proposals?
- 3- What are the perspectives of the PhD supervisors towards the EFL PhD Arab postgraduates' use of citations in the literature review chapter of PhD proposals?

The aim of the present study is not to make generalisations, rather, it seeks to fully identify the citation use and explore challenges of citations by EFL Arab postgraduates in two disciplines that belong to two different domains of knowledge. Therefore, the qualitative study was adopted in order to present a more detailed demonstration of the citations use and perceptions. According to Bruce (2008), the Systemic Functional Linguistics approach in classifying texts implies understanding the language within the local situation (variables of the context) and the cultural context (genre).

According to Dörnyei (2007, p.243), *“qualitative research is iterative, using a nonlinear, „zigzag” pattern: we move back and forth between data collection, data analysis and data interpretation, depending on the emergent results”*. Thus the analysis in the present study was achieved qualitatively and was supported quantitatively in order to highlight the possible differences and/ or similarities in using citations in two disciplines with two different domains of knowledge.

### **3.3 Setting**

The present study was conducted in Malaysia, including EFL PhD Arab postgraduates of Applied Linguistics and Information Technology who have finished their PhD study at Universiti Utara Malaysia and deposited their PhD theses at (Sultanah Bahiyah Library). The study also involved EFL PhD Arab postgraduates who have already passed their PhD proposal defense successfully at Universiti Utara Malaysia in two disciplines: Information Technology and Applied Linguistics. PhD supervisors from Applied Linguistics and Information Technology at Universiti Utara Malaysia (UUM) were also involved in interviews.

### **3.4 Sampling**

In the present study, the researcher purposefully selected individuals and sites. The individuals were represented by PhD theses of Applied Linguistics and Information Technology by EFL PhD Arab postgraduates, EFL PhD Arab candidates in Applied Linguistics and Information Technology and PHD supervisors in Applied Linguistics and Information Technology. The sites were represented by Universiti Utara Malaysia and Sultanah Bahiyah Library. According to Creswell (2012, p. 205), “in qualitative research, we identify our participants and sites on purposeful sampling, based on places and people that can best help us understand our central phenomenon”. In any qualitative study, the selection may involve one site or several sites, individuals or groups, or some combination because purposeful sampling can be applied to both sites and individuals (Creswell, 2012). Under the purposeful sampling, there were several sampling strategies that were adopted in the present study (Patton, 1990; Creswell, 2008, 2012). Table 3.1 demonstrates the purposeful

sampling strategies adopted with the three sources of information in the present study.

Table 3.1

*Sampling Strategies Used with Sources of Data*

No	Sources of Data	Before data collection starts	After data collection starts
1	The Literature review chapters of 20 PhD theses (Applied Linguistics and Information Technology) by EFL PhD Arab postgraduates at Universiti Utara Malaysia.	Homogenous purposeful sampling	-----
2	Conducting retrospective interviews with EFL PhD Arab candidates of Applied and Information Technology	Homogenous purposeful sampling	Snowball purposeful sampling
3	Conducting interviews with the PhD supervisors of EFL PhD Arab postgraduates at Universiti Utara Malaysia	Purposeful sampling	-----

### 3.4.1 Literature Review Chapters of 20 PhD Theses

The first source of information was represented by the literature review chapters of 20 PhD theses in Applied Linguistics and Information Technology by EFL PhD Arab postgraduates. These theses were deposited at Sultanah Bahiyah Library in the form of either a hard copy or a soft copy (PDF). The homogenous purposeful sampling was adopted before the data collection started in order to choose theses that are produced only by EFL Arab postgraduates in two disciplines: Applied Linguistics and Information Technology. One of the most important points in the current study was the comparable genre, whereby all the 20 PhD theses were produced by EFL PhD Arab postgraduates at Universiti Utara Malaysia.

There were several criteria in choosing the literature review chapters of these PhD theses. The first criterion was choosing the PhD theses that were produced during the period from 2010 to 2015. The second criterion was selecting PhD theses by EFL PhD Arab postgraduates only. The third criterion was choosing PhD theses in Applied Linguistics and Information Technology. The fourth criterion was choosing the PhD theses by EFL Arab postgraduates at Universiti Utara Malaysia only. Table 3.2 and Table 3.3 present a description of the 20 PhD theses that were analysed in the present study.

Table 3.2

*Description of the 10 PhD Theses of Applied Linguistics*

No	Thesis	Nationality	Publication Date	Number of pages	Number of words	Citation System
1	P.1	Iraqi	2013	35	9,031	Harvard <sup>1</sup>
2	P.2	Jordanian	2014	75	20,744	Harvard
3	P.3	Jordanian	2014	87	21,661	Harvard
4	P.4	Yemeni	2014	62	12,139	Harvard
5	P.5	Yemeni	2014	35	8,990	Harvard
6	P.6	Iraqi	2014	69	18,149	Harvard
7	P.10 <sup>2</sup>	Jordanian	2013	88	21,541	Harvard
8	P.11	Libyan	2014	89	22,080	Harvard
9	P.12	Iraqi	2013	117	31,872	Harvard
10	P.19	Yemeni	2015	79	19,000	Harvard
Total				736 pages	185,207 words	

Ten PhD theses were from Applied Linguistics (AL), which belong to the soft domain of knowledge. Harvard system was used in the citation in these ten PhD theses.

<sup>1</sup> Author-date referencing style

<sup>2</sup> Accessing the data was achieved through several procedures; therefore, the 20 theses were coded from 1 to 20 regardless of the discipline of each thesis.

Table 3.3

*Description of the 10 PhD Theses of Information Technology*

No	Thesis	Nationality	Publication Date	Number of Pages	Number of Words	Citation System
1	P.7	Syrian	2014	69	13,815	Vancouver <sup>3</sup>
2	P.8	Iraqi	2013	73	18,526	Harvard
3	P.9	Iraqi	2014	72	16,005	Harvard
4	P.13	Jordanian	2011	65	14,743	Harvard
5	P.14	Jordanian	2012	60	13,162	Harvard
6	P.15	Palestinian	2012	37	8,547	Vancouver
7	P.16	Yemeni	2014	49	10,093	Vancouver
8	P.17	Jordanian	2011	54	12,702	Harvard
9	P.18	Iraqi	2014	70	13,380	Harvard
10	P.20	Jordanian	2012	107	27,410	Harvard
Total	10 PhD theses			656 pages	148,383 words	

On the other hand, ten PhD theses were from Information Technology (IT) which belongs to the hard domain of knowledge. Vancouver (numbering) system was used in the citation system in three PhD theses, whereas Harvard system (author, date) style was used in the other seven PhD theses.

### 3.4.2 EFL Arab Postgraduates as Participants

As for the second source of information, nine EFL PhD Arab postgraduates of Applied Linguistics and Information Technology were selected purposefully. Before the data collection started, homogenous purposeful sampling was adopted to choose only PhD Arab postgraduates from two departments, whereas snowball sampling strategy was adopted after the data collection started. The researcher in the present study was not familiar with all EFL PhD Arab postgraduates who have successfully passed their PhD proposal defense. Therefore, the researcher adopted the snowball sampling next to the homogeneous purposeful sampling in conducting the interviews. The snowball sampling, as Creswell (2008) describes it, \_is a form of purposeful

<sup>3</sup> Numbering system of citation: referencing is represented by a number in brackets [1]

sampling that typically proceeds after a study begins and occurs when the researcher asks participants to recommend other individuals to study“ (p.217). There were several criteria in selecting the participants. First, only EFL PhD Arab postgraduates from Arab countries were selected. Second, only EFL Arab postgraduates from Applied Linguistics and Information Technology were selected. Only EFL PhD Arab postgraduates in these two disciplines who passed their PhD proposal defense successfully were selected.

Though the interviews were conducted with EFL PhD Arab postgraduates from different Arab countries, according to Creswell (2008, p.257), “Multiple perspectives are important when conveying the complexity of the phenomenon in qualitative research“. These interviews could lead to diverse perspectives on the citation practices, and this diversity is supported by scholars in qualitative research because “One characteristic of qualitative research is to present multiple perspectives of individuals to present the complexity of our world (Creswell, 2008, p.214).

The number of the participants and sites can vary from one qualitative study to another. According to Creswell (2008), it is typical in qualitative studies to study only few cases or few individuals. In some studies, the researcher can study only a single study, but in other studies, the number may vary, “ranging from 1 or 2 to 30 or 40“. Dörnyei (2007) argues “an interview study with an initial sample size of 6-10 might work well“. Thus “most researchers need to make some sort of an initial plan about the sample size to schedule their investigation“ (p.127). Nevertheless, the researchers agree that the process of selecting the participants:

*„Should remain open in a qualitative study as long as possible so that after initial accounts are gathered and analysed, additional participants can be added who can fill gaps in the initial description or can expand or even challenge it” (Dörnyei, 2007, p. 126).*

The description adopted by Dörnyei, which is called ‘iteration’ to move back and forth between data collection and analysis, was adopted in the present study.

Table 3.4

*Profiles of the EFL Arab Postgraduates (Participants)*

NO	Gender	Age	L1	Country	Department	Length of the interview
Participant 1	Male	33	Arabic	Yemen	IT	1 hour/4 minutes
Participant 2	Male	42	Arabic	Jordan	AL	/25 minutes
Participant 3	Male	34	Arabic	Libya	IT	/48minutes
Participant 4	Male	36	Arabic	Iraq	IT	1 hour/17 minutes
Participant 5	Male	29	Arabic	Syria	IT	1 hour/30 minutes
Participant 6	Male	39	Arabic	Iraq	IT	/56 minutes
Participant 7	Female	—	Arabic	Iraq	AL	By email
Participant 8	Male	44	Arabic	Jordan	IT	/58 minutes
Participant 9	Female	—	Arabic	Iraq	AL	By email

Therefore, for the interview sessions, six PhD Arab postgraduate students were from Information Technology, and 3 PhD Arab postgraduates were from Applied Linguistics. Table 3.4 above presents a description of the EFL Arab postgraduate participants.

### 3.4.3 IT and AL Supervisors as Participants

As for the third source of information, a purposeful sampling was adopted in selecting five PhD supervisors: three PhD supervisors from Applied Linguistics and two PhD supervisors from Information Technology. Table 3.5 presents a description of the five PhD supervisors who participated in the present study.

Table 3.5

*Profiles of PhD Supervisors (Participants)*

<b>Participants</b>	<b>Gender</b>	<b>Department</b>	<b>Age</b>	<b>Length of the interview</b>
Supervisor 1	Male	Applied Linguistics	55	26 minutes
Supervisor 2	Female	Applied Linguistics	55	25 minutes
Supervisor 3	Female	Information Technology	38	41 minutes
Supervisor 4	Male	Applied Linguistics	39	25 minutes
Supervisor 5	Male	Information Technology	49	49 minutes

Hence, mixing purposeful strategies were adopted in the present study because Creswell (2007, p.126) argues ‘researchers might use one or more of the strategies in a single study’. Thus the aim in qualitative studies, according to Creswell (2008, p.213), ‘is not to generalize to a population, but to develop an in-depth exploration of a central phenomenon’.

### 3.5 Data Collection Procedure

According to Creswell (2012), a qualitative data collection procedure includes five interrelated steps. First, the researcher has to identify the participants and the sites to be studied. This step involved adopting a purposeful sampling strategy that best suits the study under investigation. In the present study, the participants were EFL PhD Arab postgraduates at UUM in Malaysia, PhD theses that were produced by EFL PhD Arab postgraduates who finished their PhD study at UUM, and IT and AL PhD supervisors at UUM.

The next step included gaining access to these individuals, theses and sites through obtaining permissions. This step involved submitting a consent form for interviewing the EFL participants and the IT and AL supervisors at UUM and submitting a letter to the dean to get the approval of analysing the PhD theses that were obtained from

UUM Library. This was achieved through several procedures. First, a request was submitted to the Graduate Studies Unit (GSU) at Universiti Utara Malaysia to obtain a list of names of EFL PhD Arab postgraduates who finished their PhD study at UUM in Applied Linguistics and Information Technology.

However, some PhD theses of Applied Linguistics and Information Technology by EFL PhD Arab postgraduates were deposited at the library of UUM, but the students' names were not included in the list. Hence, after identifying the names of these students through other students from the same department or through their supervisors, some theses were added to the main list. This was followed by submitting another letter to the dean of AHS GS at the Universiti Utara Malaysia to use the theses for academic purposes. Two requests were submitted after adding new names to the list of EFL PhD Arab postgraduates who got their PhD degree in Applied Linguistics and Information Technology from Universiti Utara Malaysia. Some students were contacted personally to get their PhD theses; one student was through her supervisor, whereas the other student was communicated personally via email by the help of another student who belongs to the student's nationality. Another student was added to the list after getting information about his nationality through his supervisor. The researcher contacted the supervisor personally through mobile messages. A fourth student was contacted personally and he sent a soft copy of his PhD by email. To use theses for academic purposes, at the front matter of each PhD thesis, there is a section called 'permission to use', where the author of the thesis gives the right to use his/her thesis for academic purposes only.

As for the participants who were included in the interviews, they were identified by the help of their supervisors and friends and an appointment was selected with each participant individually. One interview was conducted in the room of the Masjid at UUM. The other interview was conducted in the Surau of DPP MayBank at UUM. Three interviews were conducted in the meeting room of the department of Information Technology at Universiti Utara Malaysia. Another interview was conducted at the library; in one of the rooms that are specified for academic objectives. The place of the interview was selected based on the wish of each interviewee. These six Discourse-based interviews (DBIs) were conducted with the six EFL PhD Arab postgraduates from Information Technology. Open-ended questions and semi-structured interview questions were adopted in interviewing these participants (Appendix J). A tape-recorder was used in the recording of the interviews after getting the consent of the participants. While interviewing, the researcher wrote down some notes. At the end of each interview, the researcher asked the participants about their opinion of the type of the interview questions and if they would like to add questions that are not included. Then, each interview session was ended after thanking the participant and assuring to him that the information that was provided is used only for academic purposes. There was a kind of oral agreement between the researcher and the head of the IT department at UUM that there will be a workshop about using citations after finishing the study successfully. The workshop will be presented by the researcher and it is targeting particularly IT students at Universiti Utara Malaysia.

As for the interviews with EFL PhD Arab postgraduates from Applied Linguistics department, only three participants were included: one male and two females. A

limited number of Applied Linguistics candidates were involved in the present study due to many reasons. First, there was only one male student who passed his PhD proposal defense successfully. This student was interviewed individually in his room at the DPP TradeWinds based on his wish. The interview was tape-recorded. As for the other female students, their husbands were communicated through a mobile phone and email. In Arabic culture, meeting a woman or a girl is not accepted due to social and religious considerations; therefore, answering the interview questions was not conducted face-to-face. Rather, the interview questions were sent by email. For one of the students, she gave enough details when answering the interview questions, whereas the other student gave brief answers. Consequently, the researcher had to forward the answers to her again in order to give more details. A fourth female student from Applied Linguistics was contacted through her husband, but she refused to be interviewed or answer the interview questions by email due to having no time as her husband said. Other two students, one in AL and one in IT, refused to be interviewed.

Regarding the interviews with the PhD supervisors, those who are in IT were identified through the help of a lecturer at the same department. The two supervisors were contacted through email and the interview questions were sent to them through email in order to be familiar with the type of the questions and the purpose of the study. The five interviews were conducted individually and were tape-recorded after signing a consent form. Four PhD supervisors from Applied Linguistics and three PhD supervisors from Information Technology refused to participate in the study.

As for the PhD supervisors from Applied Linguistics, they were identified through the help of the researcher's supervisor. They were contacted through email and mobile messages. The interview questions including the purpose of the study were also sent to them by email. Semi-structured interview questions and open-ended questions were used (Appendix N). The interviews were tape-recorded after getting the consent of the supervisors. Notes were written down while the interviews were in process. According to Creswell (2008), open-ended questions in the qualitative studies allow the participants to express their experiences without being limited by the perspectives of the researcher.

Interviewing students, according to Hyland (2011), represents a basic issue because a researcher can get more information about the learning experiences of students, their understanding of writing and how they respond to the different tasks of writing in English. An introspection method was adopted for such Discourse-Based interviews (DBIs). According to Mackey and Gass (2005), introspective method is like other methods that is used to having the participants reflect on mental processes. In addition, Dörnyei's (2007) argument implies that the individual himself/herself can be a source of the information in such cases, and the multiple ways adopted to get information from the participants, when solving a problem, performing a task or making a judgement, are classified under the umbrella term introspective method'. When adopting this method to get information, the generated data are called verbal report' or verbal protocol' (p.147).

According to Mackey and Gass (2005), using verbal report has both advantages and disadvantages. On the one hand, using verbal reports enables the researcher to access

information that is unavailable through other means. On the other hand, the disadvantage of using verbal report is associated with the extent of validity and reliability of such verbal reports in self-report and self-observational data. Validity and reliability of these reports are associated with time between the event or the task that is reported and the reporting itself. If it is short, it will be possible to achieve more accurate reporting. This aspect, validity and reliability, is relatively applicable in the present study because the participants who were interviewed were still in process of editing, correcting and updating information in the literature review of their PhD proposal. On the other hand, some of the PhD theses that were analysed dated back two to five years ago. That is to say, there is long time between achieving the task and conducting the retrospective interview, and this could affect the validity and reliability of the reporting negatively.

Stimulated Recall, according to Mackey and Gass (2005), is another subset of the introspective measure. This stimulated recall takes place after the occurrence of the targeted thought processes. For such a technique, the researcher uses a kind of stimulus, such as a video, a recording, or a written work. Thus such a tangible stimulus is used as a reminder of the event to stimulate the participants to retrieve their inner thoughts during the event that they have produced. Thus for the retrospective interviews, the participants in the current study were stimulated by a stimulated recall represented by pages of their literature review chapter of their PhD proposals. The participants were asked to retrieve information related to their inner thoughts associated with their citation use in writing the literature review chapter of their PhD proposal.

Discourse-Based Interviews (DBIs) were used as a source of information, as Patton (1990) argues *“the purpose of interviewing, then, is to allow us to enter into the other person’s perspective”* (p. 72). Lancaster (2016) states that DBIs (Odell and Goswami, 1982; Odell, Goswami, and Herrington, 1983) are an effective research methodology used to explore writing choices in the performances of writers. Hence, DBIs can have significant pedagogical functions. A Text-Based Interview (TBI) was conducted to ask the participants about their actual performance of using the citations. Hyland stated that TBIs and DBIs are the same in most cases (personal communication, October 13, 2016). It is believed that such a kind of interviews limits the questions to the performance and gives the researcher an opportunity to highlight unveiled information and attempt to find answers to students’ performance rather than attributing this performance to assumption and beliefs. In reviewing a book by Hyland, Swales (2013) argues that Hyland supports text-based interviews as *“a means of capturing disciplinary language use, both in its regularities and in its variations, on a sufficiently large scale”* (p.1). In addition, Gardner (2012) argues that understanding the participants’ perspectives on their writing practices and integrating this together with analysing a text is very critical in applying the research findings in teaching English for Academic Purposes (EAP) because focusing on practices alone would be insufficient. Ethnographically, *“talk around a text”* was also advocated by Lillis (2008) as a means for encouraging the student writers to reflect on their academic writing, and thus, such a kind of *“contextualist”* helps in the understanding of the phenomenon through combining the text and the context together.

For the retrospective interviews, Dörnyei (2007) recommends to conduct the interviews “in the respondent’s L1” (p. 150), as in a study by Nguyen and Pramoolsook (2016). In this regard, Creswell (2008, p.264) argues “state the dialogue in the participants’ native language or in the regional or ethnic dialect”. Hence, the Arabic language mixed with the English language spontaneously was used. This gave the participants more opportunities to express themselves because speaking in English could probably impede them from expressing their inner thoughts well. The researcher’s native language is Arabic and he has much experience in teaching English and translation (9 year experience of English teaching and translation in Syria, Saudi Arabia, and Malaysia). This helped him in translating the participants’ responses to the interview questions.

The fourth step in data collection procedure involved determining which kinds of information will answer the research questions, and which protocol or instrument will be used to collect and record the information. To achieve this step, each source of information has certain instruments. For example, after determining the number of the PhD theses to be included in the study, the citations of each literature review were identified based on Swales’ (1990) classification of citations: the integral citation and the non-integral citation. Each citation was extracted and included in tables in a separate Word Document. The section of the citation, the number of the paragraph that includes the citations, the number of line of the citation and the page number of the citation based on each thesis were identified. Three research objectives (objective one, objective two, and objective three) were used in analysing the citations. Each research objective was analysed separately. Hence, the citations were checked three times; each time involved analysing the citations to achieve each of the

three objectives of the study. The tables for analysing the objectives were designed by the researcher himself after designing many tables till reaching the one that best fulfils each objective. Each table used in analysing the citations was designed to enable quantifying the findings.

In data collection procedure, a check list designed by the researcher was used because in qualitative inquiry, *‘the researcher is the instrument’* (Patton, 1999, p.1198) to explore the citation practices and the possibility of re-classifying these citation types as well as identifying other lexico-grammatical features under the three language metafunctions of the SFL (Interpersonal, Ideational and Textual meanings). The *‘checklist is the most suitable instruments in this study’* (Gay, 1996 as cited in Manan and Noor, 2014). The final step involved administering the data collection and discussing ethical issues, which is addressed in this chapter. Hence, collecting data in the current study is based on three sources of information.

- 1) The first source was based on analysing the Literature Review chapters of 20 PhD theses written in English by EFL PhD Arab postgraduates. Four Word Documents were used; each Word Document involved a table to analyse the citations based on the four research objectives related to the three language metafunctions of Systemic Functional Linguistics, stated in Research Question One.

R/Question 1- How are the language metafunctions realised in the clauses of the citations in the literature review chapter of EFL Arab postgraduates’ PhD theses?

R/Objective 1- To explore how the interpersonal meanings are expressed in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.

R/Objective 2- To describe how the ideational meanings are realised in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.

R/Objective 3- To identify how the textual meanings are expressed in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.

R/Objective 4- To evaluate the citations use used by EFL Arab postgraduates in the literature review of their PhD theses.

2) Interviewing nine EFL PhD Arab postgraduates who were involved in pursuing their PhD study after they have defended their PhD proposal defense successfully at UUM was the other way of collecting data. Seven participants were individually interviewed face-to-face, tape recorded, and were asked open-ended questions about issues related to writing the literature review in general and semi-structured questions about citation practices in specific. The other two female students answered the interview questions and sent their responses through their husbands' emails. Interviewing the EFL PhD Arab postgraduates was based on their PhD proposals. Some questions were directed towards their writings in order to get a full comprehension and understand why they chose certain linguistic or citation forms.

3) Interviewing PhD supervisors from Applied Linguistics and Information Technology at UUM was the third source of collecting the data. Semi-structured questions were used in answering part two of objective five of the present study. The interviews were conducted face-to-face individually and were tape recorded. Interviewing EFL PhD Arab postgraduates and PhD supervisors in Applied Linguistics and Information was to answer Research Question Two and Research Question Three, respectively

R/Question 2- What are challenges faced by EFL PhD Arab postgraduates in the citation practices when writing the literature review chapter of their PhD proposals?

R/Question 3- What are the perspectives of the PhD supervisors toward the EFL PhD Arab postgraduates' use of citations in the literature review chapter of PhD proposals?

Objective Five stated below is to answer Research Questions Two and Three

R/Objective 5- To explore the challenges faced by EFL PhD Arab postgraduates in the citation practices when writing the literature review chapter of their PhD proposals.

Figure 3.1 below describes the general plan in conducting the study. The first step was to obtain the list of names of EFL PhD Arab postgraduates in Applied Linguistics and Information Technology from Graduate Studies Unit (GSU) at Universiti Utara Malaysia. This was followed by submitting two requests to the Dean of AHSGS in order to use the PhD theses for academic purposes. The second step was identifying EFL PhD Arab postgraduates in Applied Linguistics and Information Technology who defended their PhD proposal successfully to interview them. The

final step was identifying PhD supervisors in AL and IT in order to conduct interviews with them.

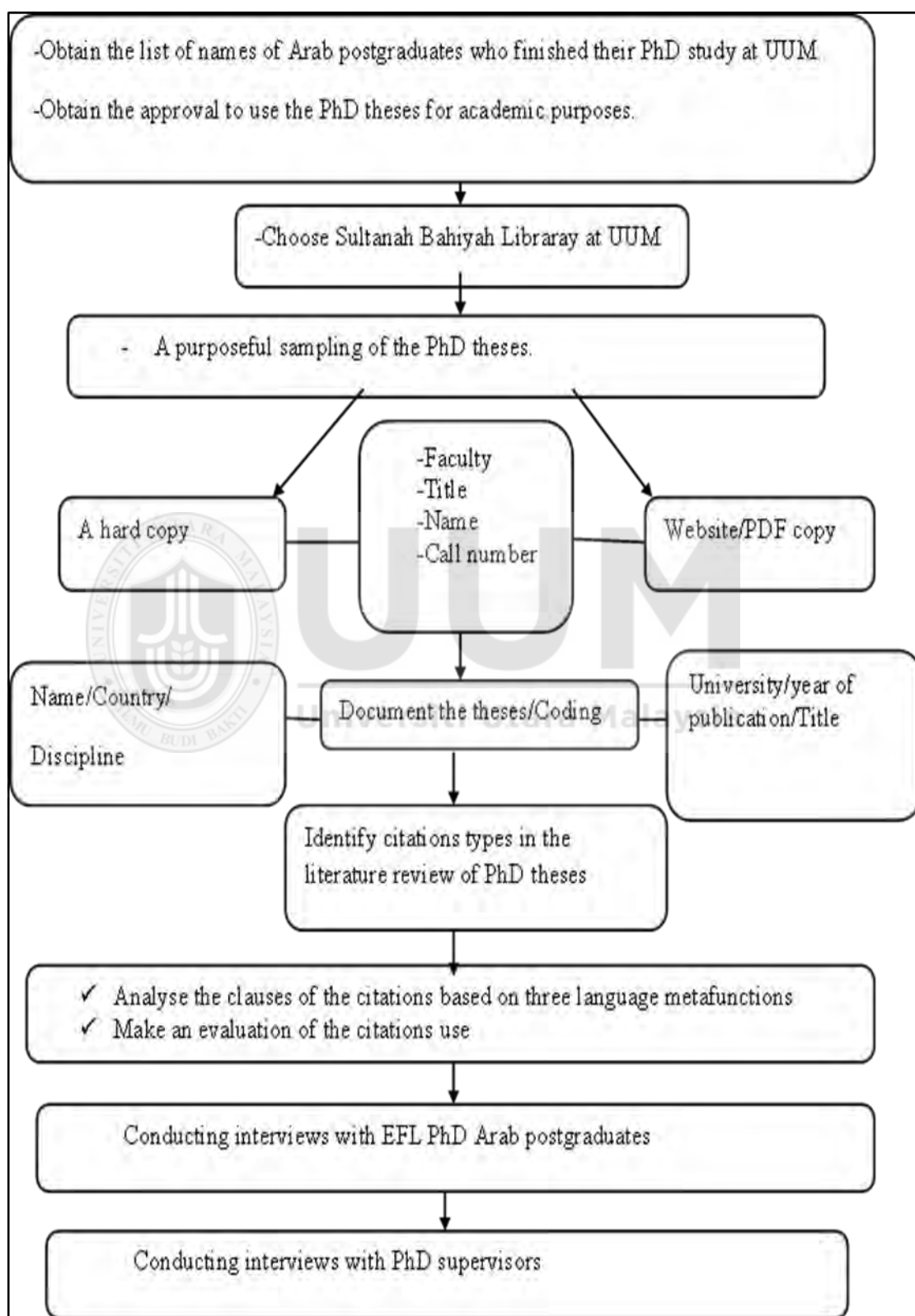


Figure 3.1. Stages of conducting the study

### 3.6 Data Analysis

The qualitative analysis was adopted in analysing the clauses of the citations in each literature review chapter of the 20 PhD theses. The data analysis of the present study involved three separate procedures based on the source of data.

A) First, analysing the literature review chapter of the 20 PhD theses was achieved subsequently with each research objective, as follows:

1) For the first research question (How are the language metafunctions realised in the clauses of the citations in the literature review chapter of EFL Arab postgraduates' PhD theses?), the data analysis for this research question was associated with three research objectives. Thus, each research objective was analysed separately after extracting all the citations (the integral and non-integral citations). For the interpersonal meanings, the analysis was based on identifying the mood of the clauses in each citation, the Mood elements (Subject and Finite), the structure of the Residue [Predicator, Complement, Adjunct (Circumstantial), Conjunctive Adjunct, Modal Adjunct (Mood Adjunct and Comment Adjunct), and modality (modalisation and modulation)]. A tick mark (✓) was employed when identifying each of these constituents in the clause. Quantifying the data was also used besides the qualitative analysis, specifically for the constituents that were represented by the cited author. Tables and figures were used for more demonstration and comparing the findings in the literature review chapters of Applied Linguistics and Information Technology.

The second research objective (part one) is related to the experiential meanings in the clauses of the integral and the non-integral citations. The analysis was based on

identifying the type of the processes used in each clause. Hence, the main unit of analysis is the clause, since Halliday (1985, p.101) states *“the clause is the most significant grammatical unit, in this case because it is the clause that functions as the representation of processes.”* The taxonomy of the processes presented by Halliday (1985) and Halliday and Martin (1993) was adopted which involved Material processes, Mental processes, Relational processes, Verbal processes, Behavioral processes, and Existential processes. Each type of these processes was identified based on a list prepared by the researcher. The analysis also involved identifying the participants and the circumstances that are associated with these types of processes. The qualitative analysis was supported by quantifying the findings to show the similarities and/or differences in using the experiential meanings in the citations of the LRs of Applied Linguistics and Information Technology theses. Similar to the interpersonal meanings, a special focus was on the roles of the cited author under the experiential meanings.

As for part two of objective two, it was concerned with the logical meanings. The analysis involved identifying the clause complex used in the integral and the non-integral citations. The clause complex, according to Halliday (1985), is the grammatical unit that is above the clause. Halliday clarified the difference between the sentence and the clause complex. The sentence is the orthographic unit contained between two full stops. Thus, the sentence is a constituent of writing, whereas the clause complex is a constituent of grammar; in other words, it is a grammatical unit above the clause. The analysis of the clause complex in the citations involved qualitatively identifying the interdependency: parataxis and hypotaxis as well as the logico-semantic relationships between clauses of the clause complex. This involved

inductive and deductive analyses of the clause complex. Based on Halliday's (1985) functional theory, two logico-semantic relationships are used: Projection and Expansion and each one of these is subcategorised into other subcategories. Thus, each clause complex was analysed based on a list prepared by the researcher. This objective was analysed twice because in the first time, the findings related to the subcategories of Projection and Expansion were not identified. In the second time of analysis, the two main logico-semantic relations, Projection and Expansion, as well as their subcategories were identified and the findings were quantified to support the similarities and /or differences in using the logical meanings in the citations of the literature review chapter of AL and IT PhD theses.

The third objective of the research question one addressed the textual meanings. The textual meaning was concerned with characterizing the clause as a message that is known as a THEMATIC structure. The analysis of the Textual meanings was based on identifying the type of the THEME in each clause of the citations, the cited author as a THEME, the cited author as a Rheme, a marked THEME, and a predicated THEME. A list of all these characteristics was designed; each clause of the citations was analysed through using a tick mark next to each classification. The findings were quantified and provided by tables to show the similarities and/or differences in using THEME/RHEME in the clauses of the citations.

Regarding the four research objective, it was an attempt on the part of the researcher to present an evaluation of the citations practices based on the findings that were obtained from objectives one, two, and three.

**B)** For the interviews with the EFL PhD Arab postgraduates, the following procedure was adopted in analysing their responses to the interview questions. The EFL PhD Arab postgraduates were informed of the purpose of the study and were also motivated to discuss their experience expressively when they wrote the literature review chapter of their PhD proposals and the challenges they faced in citing information from the original sources. Discussing the citations practices attracted their interest and attention because it is associated directly with their practical writing; this motivated them to elaborate more on their citation problems.

Analysing data qualitatively, as Creswell (2008) suggests, was achieved by means of themes that are similar codes to form the main ideas. Based on Creswell's (2008, p.250) suggestion, the researcher employed a preliminary exploratory analysis to inductively explore the data and get 'a general sense of the data'. The initial analysis resulted in several codes. The multiple codes obtained at the initial stage were minimized to six major layering themes with a multiple interconnected level of minor themes because it is typical to identify several types of themes (Creswell, 2008). Having only a small number of themes was advocated by Creswell (2008, p.252) who states 'it is best to write a qualitative report providing detailed information about a few themes rather than general information about many themes'. These themes were developed and supported by quotations from the participants' dialogue.

A hand analysis, mind mapping, and visual mapping were the strategies employed in analysing the data. In other words, the data were read after being transcribed and translated and marked by hand because the analysis involved a small database.

According to Buzan (1993), it is argued that the mind mapping process allows free thinking and clears the mind of any previous assumptions about the subject under investigation. Mind mapping is a technique that is represented by a diagram that shows the concepts and ideas which are associated with a central key word or idea. Primary branches represent the major ideas or themes around the central topic, and secondary branches include more concrete comprehensible examples. In spite of the advantages of using software tools in qualitative studies, Dörnyei (2007, p.263) argues “the most important point to stress about CAQDAS software is that these programs do not do any real analysis for us“, but they are used for data management and archieving procedures. This was also supported by Kelle, who is an expert in using CAQDAS (read Kelle, 2004, p.286). Thus a software was not used in the analysis of the data in the present study.

Using a hand analysis was adopted in the current study, following some suggestions by Creswell (2008). Using a hand analysis, according to Creswell (2008), is preferred when: A) Analysing small data of less than 500 pages. B) When the researcher is not trained to using a computer program or not comfortable with using a computer software for analysing qualitative data. C) When the researcher wants to be close to the data. D) When the researcher has time to adopt a hand analysis.

C) For the interviews with the PhD supervisors from Applied Linguistics and Information Technology, they were conducted in English because the five interviewees were Malay lecturers with English as their second language. An initial analysis of the transcription of the interviews was adopted at the beginning of the analysis. The major themes were formed after the inductive analysis of the

transcribed data. A hand analysis, mind mapping and visual mapping were the main strategies for the analysis of the data.

### **3.7 Pilot Study**

With the purpose of measuring the validity of the checklist, a pilot study was conducted. The pilot study included the literature review chapters of two PhD theses chosen from UUM library; one in Information Technology (IT) discipline as a hard domain of knowledge and one in Applied Linguistics (AL) discipline as a soft domain of knowledge. The writers of these PhD theses are two EFL PhD Arab postgraduates from Iraq (IR) and Jordan (JO).

### **3.8 Findings of the Pilot Study**

With the purpose of checking the validity of the instruments that were designed by the researcher, a pilot study was conducted, involving a qualitative analysis of the clauses in the citations used in the literature review chapter of two PhD theses by EFL PhD Arab postgraduates.

The first question: How are the language metafunctions realized by the clauses of the citations in the literature review chapter of PhD theses by EFL PhD Arab postgraduates? The first objective was to explore how the interpersonal meanings are realized in the clauses of the citations in the literature review chapter of PhD theses by EFL PhD Arab postgraduates at Universiti Utara Malaysia.

The integral citation and the non-integral citation of Swales (1990) were identified to analyse the clauses used in these types of citations. The following examples and

explanations clarify the interpersonal meanings that are expressed by the clauses used in the integral and non-integral citations.

- (1) *Pemberton (2003) has offered a classification in order to remember the new vocabulary items. (AL/JO)*

Pemberton (2003)	has	offered	a classification	in order to	remember	the new vocabulary items
Subject	Finite	Predicator	Complement	Adjunct: Conjunction	Predicator	Complement
MOOD		Residue			Residue	

In example (1), four constituents formed the first clause: Subject, Finite, Predicator, and Complement. The name of the cited author *‘Pemberton’* has the function of the Subject at the interpersonal meanings in the declarative clause. It is also a part of the Mood together with the Finite *‘has’*. In this integral citation, according to Swales’ (1990) classification, two clauses were used in one citation. The second clause starts with an Adjunct: Conjunction *‘in order to’*, followed by the *‘Predicator’* *‘remember’* and the Complement *‘the new vocabulary items’*; but it has no *‘Subject’* constituent.

- (2) *Crystal (1997) discusses the importance and the wide usage of English. (AL/JO)*

Crystal (1997)	Discusses		the importance and the wide usage of English.
Subject	Finite	Predicator	Complement
MOOD		Residue	

In example (2), the integral citation was used with only a clause simplex. It is a declarative clause in which the cited author represented by *‘Crystal’* is a nominal constituent that functions as the Subject. No Finite was used in this clause; therefore, the predicator *‘discusses’* has two functions: the Finite and the Predicator.

- (3) *In the academic field, Musa (1985) carried out a study on the importance of English in the academic institutions. (AL/JO)*

In the academic field	Musa (1985)	carried out		a study on the importance of English	in the academic institutions
Adjunct	Subject	Finite	Predicator	Complement	Adjunct
Residue...	MOOD		.....Residue		

In example (3), the integral citation was used with a clause simplex in which the cited author functions as the Subject of the clause. Similar to example (2), no explicit Finite was used in this clause; therefore, the Predicator *carried out* is divided into two parts to function as a Finite and a Predicator. The Subject represented by the name of the cited author and the Finite constituent form the MOOD element of the clause, whereas the other constituents, represented by the Complement and the two Adjuncts form the Residue element of the clause.

(4) *Firstly, the various student-desired purposes are apparent in Oxford's (1990) definition.* (AL/JO)

Firstly	the various student-desired purposes	are	apparent	in Oxford's (1990) definition.
Adjunct: Conjunction	Subject	Finite	Complement	Adjunct
	MOOD		Residue	

In example (4), the integral citation was used with a clause simplex. No predicator is used in this clause because it has the verb to be *are*. A nominal constituent and the verb to be *are* form the Mood element of the clause, whereas the Complement and the Adjunct are the two elements of the Residue.

(5) *Bialystok (1978) proposed a model which includes four types of strategies.* (AL/JO)

Bialystok (1978)	proposed		a model	which	includes		four types of strategies
Subject	Finite	Predicator	Complement	Subject	Finite	predicator	Complement
Mood		Residue		Mood		Residue	
Mood		Residue					

In example (5), the integral citation was used with two clauses. The cited author functions as the Subject of the first clause.

- (6) *Questionnaires can be defined as ——a set of questions on a topic or group of topics designed to be answered by a respondent* (Richards et al. 1992, p. 303). (AL/JO)

Questionnaires	can	be defined	as.....
Subject	Finite	Predicator	Complement
Mood	Residue		

In example (6), the non-integral citation was used, whereby the cited author does not have any functional role in the structure of the clause. This clause is different from other clauses in using the constituent ‘can’ as a Finite modal operator that expresses probability within modalisation.

- (7) *According to Das et al. [32] one of the major advantages of mobile ad-hoc networks is the attractive choice for military field.* (IT/IR)

In example (7), the integral citation is a clause simplex in which the cited author functions as the Adjunct that is a part of the Residue.

According to Das et al.	one of the major advantages of mobile ad-hoc networks	is	the attractive choice	for military field.
Adjunct	Subject	Finite	Complement	Adjunct
Residue...	MOOD		.....Residue	

- (8) *The works in [38, 39, 47, 40, 32] have evaluated the comparison of proactive and reactive with multi-hop routing protocols such as DSDV, TORA, DSR, ABR, and AODV.* (IT/IR)

The works in [38, 39, 47, 40, 32]	have	revealed	the comparison of proactive and reactive with multi-hop routing protocols such as DSDV, TORA, DSR, ABR, and AODV.
Subject	Finite	Predicator	Complement
MOOD	Residue		

In example (8), the integral citation is a clause simplex, in which the cited author is not stated explicitly; rather, it is integrated through the preposition *in* to function within the nominal group as the Subject of the clause.

The first part of the second objective was to describe how the experiential meanings are realized in the clauses of the citations in the literature review chapter of PhD theses by EFL Arab postgraduates. The explanation below presents a description of the Transitivity System.

- (9) *A wide variety of disciplinary perspectives have been developed in this area, but the most influential theories are linguistics and psycholinguistics ones (Mangubhai, 2006). (AL/JO)*

In example (9), the non-integral citation with a clause complex was used in which the cited author does not have any functional role. The two clauses included two processes: *developed* and *are*. The process *developed* is material, whereas *are* is a relational process.

- (10) *Mangubhai (2006) indicates that there are 40 to 60 Second Language Acquisition (SLA) theories and no certain theory can merge all the variables to specify an absolute theory of second language learning. (AL/JO)*

In example (10), the integral citation with a clause complex was used; four clauses were used in the integral citation. The processes *indicates*, *are*, *merge*, and *specify* were used respectively in the four clauses of the citation. These processes are classified as follows: *indicates* is verbal, *are* is existential, *merge* is material and *specify* is also material. In the clause that involves the cited author *Mangubhai* as a participant, this cited author has the role of a *Sayer* since it is used with the verbal process *indicates*.

- (11) *The behaviorist theory believes that language is a learnt behavior and is basically learned through imitation (Skinner, 1957; Hilgard, 1962). (AL/JO)*

In example (11), the process *believe* is mental.

- (12) *They indicate that strategies might be used consciously but it can also become habitual and automatic with practice. (AL/JO)*

In example (12), the names of the cited authors were replaced by a pronoun that is used with the process *indicate* as a verbal process. Thus, the pronoun *They* functions as a *Sayer*.

- (13) *It has been discovered that the node mobility and interference/collision have totally different effects on the lifetime of the routes as stated in Lenders et al. [34]. (IT/IR)*

In example (13), three clauses were used in the integral citation in which *discovered*, is a verbal process *have*, is a relational possessive process, and *stated* is also a verbal process.

Based on the findings related to the types of processes used in each clause of the citations, Figure 3.2 presents a clarification of these processes.

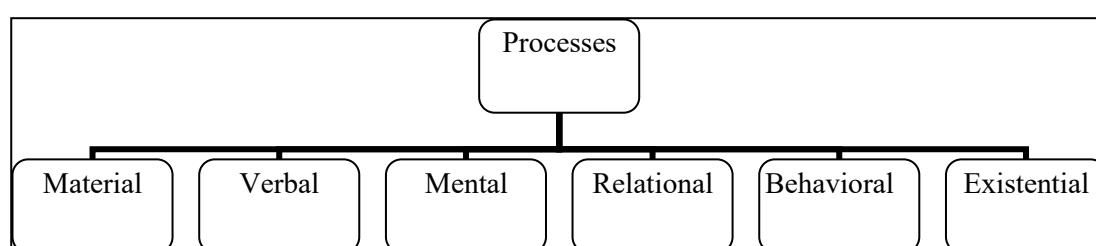


Figure 3.2. Processes used in the clauses of the citations

The second part of objective two was to explore the logical meanings realized by the clause complexes of the citations in the literature review chapter of Applied Linguistics and Information Technology. This implies that only citations with a clause complex were involved in the analysis.

(14) *As (Brown, 2000) points out, this approach —failed to account for the abstract nature of language, for the child,s creativity, and for the interactive nature of language acquisition.‖ (p. 24). (AL/JO)*

In example (14), although the name of the cited author is put in parentheses, it still has a functional role, thus it is considered an integral citation. In this citation, two clauses were used: the projecting clause and the projected one. The projecting clause included the verbal process *point out*”, whereas the projected clause is a quotation with the process *„failed.”* Such an example realises *Projection* as a logico-semantic relationship between the two clauses of the clause complex.

(15) *According to Ong [84], the researchers have shown that the use of multipath routing approach can maintain correct transmission for longer period than a single path approach. (IT/IR)*

In example (15), two clauses were used in the integral citation: the primary *projecting*‘ clause and the secondary *projected*‘ clause. In the primary *projecting*‘ clause, the verbal process *showed*‘ was used, whereas in the secondary *projected*‘ clause the process *maintain*‘ was used. Thus, the clause complex in this integral citation realizes *Projection* as a logic-semantic relationship between the two clauses of the clause complex. This kind of *Projection* is called *Reporting Indirect Speech*.

(16) *Bialystok (1978) proposed a model which includes four types of strategies. (AL/JO)*

In example (16), the integral citation was used with two clauses; a clause complex was used, but the logico-semantic relationship is *Expansion*. The secondary clause starting with *which....*‘ extends the meaning of the primary clause by means of *Elaboration*. In other words, the secondary clause presents more particular meaning to the primary clause by introducing specific information. Hence, there are two logico-semantic relationships of clause complexes of the citations which are *Projection* and *Expansion* depending on the type of the process used in the primary

clause. In some examples, the two logico-semantic relationships may be involved in one citation or one of them is used twice in one citation due to using a multi-clause citation, as in example (17) below.

- (17) *It has been discovered that the node mobility and interference/collision have totally different effects on the lifetime of the routes as stated in Lenders et al. [34]. (IT/IR)*

In example (17), the integral citation was used with three clauses; two clauses have the verbal processes *discovered* and *stated*, whereas the other clause has the relational process *have*. The primary *projecting* clause includes the verbal process *stated*. The other two clauses realize *Projection* as a logico-semantic relationship between the two clauses. Thus in this citation, two projecting clauses were used with two verbal processes.

- (18) *Wilkins (1972 p.111) states that „Without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed“.*  
(AL/JO)

In example (18), the integral citation was used with a clause complex; the primary *projecting* clause includes the verbal process *states*. This subcategory of *Projection* is called *Quoting Direct Speech* in which the projected clause takes the form of a quotation. Thus the logico-semantic relationships of clause complexes used in the citations are demonstrated in Figure 3.3.

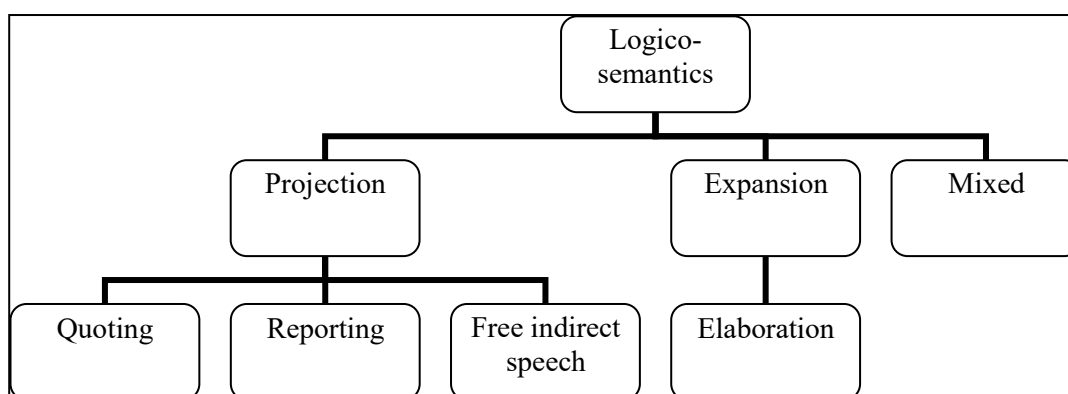


Figure 3.3. Logico-semantic relationships of clause complexes

The third objective was to identify how the textual meanings were realized in clauses used in the citations of the literature review chapter of PhD theses by EFL PhD Arab postgraduates at UUM. This objective is concerned with the two parts of the clause that are THEME and Rheme. It also focuses on the types of THEME, such as the interpersonal and topical THEME. Hence, the textual meanings depend in their analysis on the interpersonal and experiential meanings.

The following examples clarify how the constituents are used to function as the THEME or Rheme.

- (19) *According to [55], there are two kinds of failures in MANET: node failure, and link failure.* (IT/IR)

According to [55]	there	are	two kinds of failures in MANET: node failure, and link failure.
THEME	Rheme		

- (20) *Two studies developed the questionnaire based on Gu and Johnson Taxonomy's (1996), (Gu, 2002; Srikhao and Si-Xiang, 2009).* (AL/JO)

Two studies	developed the questionnaire based on Gu and Johnson Taxonomy's (1996), (Gu, 2002; Srikhao and Si-Xiang, 2009).
Topical THEME	Rheme

- (21) *Ultimately, Gu (2003) defines language learning strategies as „a series of actions a learner takes to facilitate completion of a learning task‘‘.* (AL/JO)

Ultimately	Gu (2003)	defines language learning strategies as „a series of actions a learner takes to facilitate completion of a learning task‘‘.
interpersonal	topical	
THEME	Rheme	

- (22) *It has been discovered that the node mobility and interference/collision have totally different effects on the lifetime of the routes as stated in Lenders et al. [34].* (IT/IR)

It	has been discovered	that	the node mobility and interference/collision	have totally different effects on the lifetime of the routers	as	stated in Lenders et al. [34].
Theme	Rheme	Theme		Rheme	Theme	Rheme

Examples 19, 20, 21, and 22 show the two parts of the textual meanings and the different types of THEME employed in the clauses of the citations.

### 3.9 Trustworthiness (Validity, Reliability and Credibility)

The two concepts, reliability and validity, which are related to the quantitative research are viewed as insufficient by qualitative researchers and may not be applicable to qualitative research paradigm (Golafshani, 2003). In both types of studies, researchers need to demonstrate credibility of their works. In quantitative research, for example, the credibility of the research depends on the instrument construction, whereas in qualitative research, the researcher is the instrument. Though the two concepts, reliability and validity, are addressed separately in quantitative research, in qualitative research, trustworthiness is used to encompass both.

In the current study, triangulation was used because triangulation is defined as ‘a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study’ (Creswell and Miller, 2000, p.126). This triangulation is a step adopted by the researcher, thus it expresses the researcher’s lens. In the current study, the researcher adopted three sources to collect information about citations perceptions used in the literature review chapter of the PhD proposals by EFL PhD Arab postgraduates studying at Universiti Utara Malaysia. The three sources of collecting information involved

conducting interviews with EFL PhD Arab postgraduates, analysing some pages of their PhD proposals, and conducting interviews with PhD supervisors from Applied Linguistics and Information Technology. According to Patton (1999, p.1197),

*„Triangulation is a process by which the researcher can guard against the accusation that a study's findings are simply an artifact of a single method, a single source, or a single investigator's bias“*”

Adopting triangulation is based on the assumption that no single method can sufficiently solve the dilemma of rival explanations, hence using multiple methods of data collection presents more ‘grist for the research mill...Triangulation is ideal...in which different types of data provide cross-data validity checks‘ (Patton, 1999, p.1192). In addition, triangulation can be achieved through other ways, such as mixing purposeful samples, and including multiple perspectives. Different sources of data might lead different findings. Nevertheless, this cannot be considered as a weakness, rather it can be exploited as presenting a deeper insight of the association between the topic under study and the inquiry approach. Hence, mixing purposeful sampling strategies was adopted in the present study through using homogenous purposeful sampling and snowball sampling strategies.

To further increase the trustworthiness of the findings related to interviews, the researcher adopted member checking, thus shifting the validity procedure to the participants. Member checks as described by Lincoln and Guba (1985) is ‘the most crucial technique for establishing credibility‘ (p.314). In the current study, after conducting the interviews, the data and the interpretation were returned to the participants in order to confirm the credibility of the information. The participants view the raw data and comment on the accuracy of the data. Thus, the researcher asks them how realistic and accurate the data are. The credibility of the findings was

also strengthened by reporting ‘quotes from interview data’ as suggested by Creswell (2008, p.264).

Enhancing the trustworthiness of the findings in the present study was also achieved by means of a pilot study. A pilot study was conducted with two PhD Arab postgraduates from Iraq and Syria at UUM. The first interview with the Syrian student lasted 58 minutes, whereas the interview with the Iraqi student lasted 52 minutes. The outcome of these two interviews was not included in the findings of the present study. Regarding the citation use, the literature review chapters of two PhD theses by EFL PhD Arab postgraduates from Iraq and Jordan in AL and IT were analysed. The citations that were used in the literature review chapters of these two PhD theses were extracted and analysed. The findings of this pilot study were demonstrated in Section 3.8.

The findings of the five research objectives were supported with quantifying the results. According to Leech and Onwuegbuzie (2007), analysing data is a significant procedure in the qualitative research. Hence, they suggest multiple types of analysing data, emphasizing the significance of adopting more than one type to understand the phenomenon clearly. One of these types is using *Word Count* that is based on the assumption that people are distinguished by their vocabulary and word usage patterns. By adopting such a type in the analysis process, the number of times a specific type of class mood, a constituent, a process, a category or a category word was used is counted. Although such a type has a drawback for decontextualizing the word and it may not be understood, the researcher in the present study reduced the

effect of such a drawback by giving examples extracted from the literature review chapter of EFL PhD Arab postgraduates' theses.

Using numbers in qualitative studies, according to Maxwell (1992), makes a contribution to the internal generalizability of the claims of the researchers in the qualitative area. However, this generalizability does not cover other settings, rather it is a kind of generalisation within the setting that involves several individuals. Another advantage of quantifying the data in qualitative studies is enabling the researcher to attribute specific characteristics and features to the varied perceptions, beliefs and actions of groups or settings under study. A third advantage is enabling the researcher to identify patterns that are not apparent due to using unquantified qualitative data. A further advantage of using quantitative data is presenting evidence of the researcher's interpretation to counter the claim that qualitative researchers 'cherry-pick' only specific types of their data to support their interpretations (Maxwell, 2010).

### **3.10 Ethical and Legal Issues**

In collecting data from the participants, the researcher has to anticipate the ethical issues related to the study (Hesse-Biebert, and Leavey, 2006). According to Creswell (2012), the researcher in his study needs to discuss private details of students' experience over a period of time. Therefore, there should be a sufficient level of trust based on a high level of participants' disclosure. Due to the confidential information provided by the participants, the researcher needs to protect them by developing a kind of trust with them, promote the integrity of the research, guard against misconduct and impropriety that might reflect on their organizations or

institutions and cope with the new and challenging problems (Israel and Hay, 2006). The participants were informed by the researcher that their personal and private information will be kept confidential in order to avoid negative or unexpected effects on the participants and their lives. The researcher told the participants the topic, the significance and the purpose of the study. Confidentiality of recovered data will be maintained at all times, and identification of the participants will not be available during or after the study.

### **3.11 Improvements for Main Data Collection**

The data, as was explained in section 3.4, included three sources of data: the literature review chapters of 20 PhD theses, EFL PhD Arab candidates, and PhD supervisors. Hence, the data collection started with analysing the literature review chapter of the 20 theses. Consequently, the interview questions with the EFL Arab candidates were formulated and modified based on the analysis of the literature review chapters and the pilot study that was conducted with two participants. The interview questions with the PhD supervisors were also formed, edited and modified based on the analysis of the literature review chapters of the 20 PhD theses and the interviews with the EFL Arab candidates. Regarding the literature review chapters of the 20 PhD theses, data collection improvements involved adding more PhD theses, submitting two requests to get the approval for the analysis and designing several drafts of tables and figures in order to present sufficient analyses of data.

### **3.12 Summary**

In summary, chapter three introduces the research design that was adopted in the current study. It also includes the setting, the sampling, the data collection procedure,

data analysis, a pilot study, findings of the pilot study, the issue of trustworthiness, the legal issues, the improvements in the data collection procedures and instrument, as well as stages of conducting the study.



## **CHAPTER FOUR RESEARCH FINDINGS**

### **4.1 Introduction**

The findings of the present study are presented through five sections, which correspond to the five research objectives mentioned in chapter one. Section One addresses issues related to the way the clauses are structured to reveal the interpersonal meanings that is associated with the tenor as a register variable. Section Two is composed of two parts; the first part addresses Research Objective Two which is associated with the experiential meanings of the clauses in the citations. The second part of Research Objective Two explains the logical meanings of the clause complexes in the citations. These two meanings, the experiential and the logical, form the ideational meanings which are associated with field as another register variable that probably affects the use of citations. Objective Three discusses the findings related to the textual meanings that are revealed by the structuring of the clause/s used in citations. Objective Four addresses the evaluation of the citations use. Finally, Objective Five is composed of two parts; the first part discusses the findings related to the difficulties faced by EFL PhD Arab postgraduates in citations in writing the literature review chapter of their PhD proposals. This part focuses on these challenges from the perspectives of the nine EFL PhD Arab postgraduates of Applied Linguistics and Information Technology. The other part of Objective Five addresses the challenges faced by EFL Arab postgraduates in using citations from the perspectives of PhD supervisors in AL and IT.

### **4.2 Summary of the Main Features of the Study**

The purpose of the present study is to analyse the clauses of the citations used by EFL PhD Arab postgraduates in writing the literature review chapter of their PhD

theses. Only the citations that were used with the names of the cited authors were analysed. This also involved citations that were used with pronouns or general nouns in cited statements following the citations with the name of the cited author to refer to the cited author. Thus, the clause is the main unit of analysis in the citations. The Systemic Functional Linguistics was adopted, focusing mainly on the lexicogrammatical analysis of the clause/s. Each clause was analysed through three language metafunctions, including interpersonal, ideational (experiential and logical), and textual. The fourth research objective is concerned with the evaluation of the EFL Arab postgraduate's use of citations, whereas the fifth research objective is concerned with exploring the difficulties faced by EFL Arab postgraduates in citations use. The extracted examples from the literature review chapters that were used in supporting and explaining the findings were coded as follows.

Table 4.1

*Coding the Extracted Examples of Citations*

Participant	Discipline	Nationality	Section	Paragraph	Line	Page
P.	Applied	Yemen (YE)	S.	Pr.	L.	Pg.
	Linguistics	Iraq (IR)				
	(AL)	Jordan (JO)				
	Information	Syria (SY)				
	Technology	Libya (LI)				
	(IT)	Palestine (PA)				

A qualitative analysis was used in analysing the clauses of the citations in the literature review chapters of PhD theses of AL and IT by EFL PhD Arab postgraduates. This qualitative analysis was supported by quantifying the findings. These findings were demonstrated through tables and figures to show similarities and/or differences in using citations. The discourse-based interviews with the EFL

Arab postgraduates and PhD supervisors were also analysed qualitatively and were supported by quotes from the participants' interviews. Thus, Table 4.2 illustrates the main aspects of analysing the findings.

Table 4.2

*Aspects of Analysis of the Findings*

RQ	Objectives	Findings
RQ 1	Objective One	<p>Interpersonal Meanings</p> <p>I. Mood Class of the Clause</p> <p>A) Components of the Clause</p> <p>1) MOOD Component of the Clause</p> <p>a) <u>Subject</u> of the Clause</p> <p>b) <u>Finite</u> as a Constituent of the Clause</p> <p>2) RESIDUE Component of the Clause</p> <p>a) Predicator as a Constituent of the Clause</p> <p>b) <u>Complement</u> Constituent of the Clause</p> <p>c) Adjunct Constituent of the Clause</p> <p>c[1]) Modal Adjuncts</p> <p>c[2]) Comment Adjuncts</p>
RQ 1	Objective Two, Part One	<p>Experiential Meanings (Transitivity System)</p> <p>I. Processes Types</p> <p>1) Material Processes</p> <p>2) Mental Processes</p> <p>3) Verbal Processes</p> <p>4) Behavioural Processes</p> <p>5) Relational Processes</p> <p>a- Intensive Processes</p> <p>b- Circumstantial Processes</p> <p>c- Possessive Processes</p> <p>d- Causative Processes</p> <p>6) Existential Processes</p> <p>II. Roles of the Cited Author Associated with Processes</p> <p>1) Author: Actor</p> <p>2) Author: Goal</p> <p>3) Author: Senser</p> <p>4) Author: Phenomenon</p> <p>5) Author: Sayer</p> <p>6) Author: Verbiage</p> <p>7) Author: Behavior</p> <p>8) Author: Carrier</p> <p>9) Author: Attribute</p> <p>10) Author: Token</p> <p>11) Author: Value</p>

Table 4.2 continued

		<ul style="list-style-type: none"> <li>12) Author: Carrier <u>Possessor</u></li> <li>13) Author: Agent (Attributor)</li> </ul>
		III. Circumstantial
		<ul style="list-style-type: none"> <li>1) Circumstance of Extent</li> <li>2) Circumstance of Location</li> <li>3) Circumstance of manner</li> <li>4) Circumstance of Cause</li> <li>5) Circumstance of Accompaniment</li> <li>6) Circumstance of Matter</li> <li>7) Circumstance of Role</li> <li>8) Circumstance of Agent</li> </ul>
		IV) Author as Circumstantial
		<ul style="list-style-type: none"> <li>1) Author: Agent</li> <li>2) Author: Location (Place)</li> <li>3) Author: Manner <u>Comparison</u></li> <li>4) Author: Matter</li> <li>5) Author: Accompaniment</li> </ul>
RQ 1	Objective Two, Part Two	<ul style="list-style-type: none"> <li>I. Logico-semantic relations               <ul style="list-style-type: none"> <li>A) Expansion                   <ul style="list-style-type: none"> <li>1) Elaboration</li> <li>2) Extension</li> <li>3) Enhancement</li> </ul> </li> <li>B) Projection                   <ul style="list-style-type: none"> <li>1) Quoting <u>Direct Speech</u></li> <li>2) Reporting <u>Indirect Speech</u></li> <li>3) Reporting Speech, Quoting Thoughts</li> <li>4) Projecting Suggestions</li> <li>5) Free Indirect Speech</li> <li>6) Facts</li> </ul> </li> <li>C) Combination of Projection and Expansion</li> </ul> </li> </ul>
RQ 1	Objective Three	<ul style="list-style-type: none"> <li>Textual meanings               <ul style="list-style-type: none"> <li>A) Types of Themes                   <ul style="list-style-type: none"> <li>1) Interpersonal, Topical, and Textual THEME</li> </ul> </li> <li>B) Elliptical THEME</li> <li>C) Structural THEME</li> <li>D) Predicated THEME</li> <li>E) Marked THEME</li> <li>F) Author as THEME or RHEME</li> </ul> </li> </ul>
RQ 1	Objective Four	<ul style="list-style-type: none"> <li>Evaluation of the Citation Use               <ul style="list-style-type: none"> <li>A) The Interpersonal Meanings</li> <li>B) The Ideational Meanings                   <ul style="list-style-type: none"> <li>1) The Experiential Meanings</li> <li>2) The Logical Meanings</li> </ul> </li> <li>C) The Textual Meanings</li> </ul> </li> </ul>

Table 4.2 continued

RQ 2	Objective Five, Part One	Students' Perspectives on Challenges in Using Citations <ul style="list-style-type: none"> <li>a) Credibility</li> <li>b) Adopting a stance towards citations</li> <li>c) Insufficient Knowledge in using citations</li> <li>d) Paraphrasing</li> <li>e) L2 academic writing</li> </ul>
RQ 3	Objective Five, Part Two	Supervisors' Perspectives on Challenges in Using Citations <ul style="list-style-type: none"> <li>a) Lack of reading depth</li> <li>b) Using citations</li> <li>c) L2 writing skills</li> <li>d) Positioning</li> </ul>

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#### 4.2.1 RQ 1: Objective One (Interpersonal Meanings)

This section is concerned with exploring how the clauses, including ranking clauses and embedded clauses, are structured to reveal the interpersonal meanings. Interpersonal meanings imply the strand of meaning used in the text which reveals the writer's relationships with the readers as well as the stance of the writer towards the subject matter. This involves looking at the relationship between the semantic organisation of the interaction and the grammatical differences in the mood structure of the clauses. In addition, this involves exploring the functional role of the constituents in the clauses of the different Mood types, and also looking at the role of modality, including modalization and modulation. This could probably explore how EFL Arab postgraduates reveal their stance towards the citations when citing from other sources.

##### 4.2.1.1 Mood Class of the Clause

Table 4.3 represents the Mood classes of clauses in the citations used in the literature review chapters of 20 PhD theses by EFL PhD Arab postgraduates in IT and AL.

Table 4.3

*Mood Class in IT and AL Literature Review Chapters*

Mood class	Information Technology		Applied Linguistics		Total
	F	%	F	%	
Full declarative	5386	37.55	8956	62.45	14,342
Imperative	-----	-----	1	100	1
Ranking clauses	4,375	38.3	7,127	61.97	11,502
Embedded clauses	1,011	35.58	1,830	64.42	2,841
Total citations	2,163	38.6	3,520	61.94	5,683
Clause/s per citation	2.49		2.54		

As Table 4.3 shows, the literature review chapters of IT and AL theses include 14,342 full declarative clauses. 8956 (62.45%) clauses are used in the literature review chapters of AL, whereas 5386 (37.55%) clauses are used in the literature review chapters of IT. This reveals that the literature review chapters of AL included a higher number of full declarative clauses. On the other hand, only one clause is used in the imperative one, which might reveal the unawareness of using imperative in exchanging information with the absence of the addressee. The dominance of the full declarative clauses reveals the similarity of the two domains in terms of the speech functions. In other words, giving information in the form of statements was used mostly in the literature review chapters of theses which belong to two different domains. Using the language to exchange information entails that the clauses used in the citations were employed in the form of a proposition in order to show familiarity with the research topic. Thus, there is an opportunity to argue, claim, support, negate, report, affirm, or doubt.

The literature review chapters of Applied Linguistics and Information Technology are also similar in terms of the high number of ranking clauses, (n= 4375) in IT and (n= 7127) in AL, compared with the lower number of embedded clauses, (n= 1011)

in the former and (n= 1830) in the latter. The high number of ranking clauses in the literature review of AL may be due to the high density of citations (n= 3520) and employing citations with clause complexes. For more illustration, 2.54 clauses are used in each citation in the literature review chapter of AL, whereas 2.49 clauses per citation are used in the literature review chapter of IT. This could reveal the tendency of EFL PhD Arab postgraduates in AL to use citations with clause complexes and citations with multiple clauses.

Exploring the Mood class through looking at the way clauses are structured led to the conclusion that the majority of the clauses in the citations were propositions used to exchange information by means of giving. The dominance of only one Mood class that is the full (non-elliptical) declarative indicates that the texts are written genres. In these types of written genre, it is not possible to exchange feedback between the writer and the reader as well as the common shared focus is giving information.

#### **4.2.1.2 Components of the Clause**

In clauses of the citations used to exchange information, two components are involved: MOOD and RESIDUE. MOOD involves the *\_Subject\_* and the *-Finite\_*, whereas the RESIDUE consists of a *\_Predicator\_*, a *\_Complement\_*, and an *\_Adjunct\_*. Thus, the proposition of each clause used in the citations is divided into two parts. The followings are some extracted examples from the literature review chapters of the PhD theses by EFL Arab students, which demonstrate the two components of each clause and the constituents of each component. In these two examples, the (full declarative) clause consists of two components: MOOD and RESIDUE, as demonstrated below.

(1)

Argamon et al. (2005)	analysed	the texts of the applied science, arts, commerce, and leisure.
MOOD		RESIDUE

(P.4/YE/AL/S.2.5.2/Pr.4/L.571-572/Pg.65)

(2)

Types, details, and flavors of TCP protocol	can	be found in [36, 37, 38, 59, 60].
MOOD		RESIDUE

(P.7/SY/IT/S.2.1.4/Pr.2/L.86-87/Pg.22)

In both examples (1) and (2), each citation consists of one clause simplex, and each clause has two components, which are MOOD and RESIDUE. What makes example (1) different from example (2) is using the Finite can in example (2). Another difference is using the name of the cited author as a part of the MOOD in example (1), whereas it is a part of the RESIDUE in example (2). Nevertheless, both examples involve the two components of the clause that are MOOD and RESIDUE. Thus, a clause with a full declarative clause must involve these two parts: MOOD and RESIDUE.

#### 4.2.1.2.1 MOOD Component of the Clause

The MOOD component of the clause consists of two constituents which are the Subject and the Finite, as demonstrated in the example below.

<b>CMDA</b>	<b>may</b>	be applied to four levels of language (Herring, 2004, p. 3):
Subject	Finite	
MOOD		

(P.10/JO/AL/S.2.5.2/Pr.3/L.1762/Pg.110)

In this example, the first component of the clause, which is MOOD, consists of two main constituents which are the Subject and the Finite.

The Subject, which is a nominal type element, in the clauses of these citations differs according to the type of the citation. For example, in the integral citation, the cited author can be the Subject of the clause, as in example (1) below.

- (1) ***Dinka and Lundberg (2006) indicate that within a group, different members have different roles.***  
(P.12/IR/AL/S.2.10/Pr.1/L.614/615/Pg.49)

In example (1), the citation which is an integral citation is a clause complex. It comprises two clauses; the first clause is (*Dinka and Lundberg (2006) indicate...*), and the second clause is (*.....that within a group, different members have different roles.*). In the first clause, the Subject that is a constituent of the MOOD is represented by the name of the cited author *Dinka and Lundberg*. The name of the cited author can be a part of a lengthy noun when used as a Subject of the clause, as in example (2).

- (2) ***Krashen's (1985) Affective Filter Hypothesis is adopted as the theoretical background for these variables.***  
(P.19/YE/AL/S.2.9/Pr.4/L.927-928/Pg.56).

Example (2) is an integral citation, in which the name of the cited author *Krashen* is integrated with the clause. In such an example of citations, the name of the cited author is a part of a lengthy noun which functions as the Subject of the clause.

However, in the citations which take the form of the non-integral citation, the name of the cited author still has a functional role because the name of the cited author that was put in parentheses is still considered as a part of the clause. Otherwise, the clause will be inappropriate due to having a missing constituent that is the Subject.

Therefore, in such usages, the name of the cited author does integrate with the citation as in example (3).

- (3) *In a similar study, (Taylor and Todd, 1995c) in their empirical study investigated the decomposition of the TPB. (P.20/JO/IT/S.2.2.1/Pr.27-c/L.271-272/Pg.35)*

Although example (3) takes the form of the non-integral citation, where the cited author and the date are put in parentheses, the cited author still has a functional role as the Subject of the clause. On the other hand, in the majority of the citations with non-integral citation, the cited author does not have the functional role of the Subject. Therefore, general nouns, such as researchers, studies and work are used as a Subject of the clause, as in example (4).

- (4) *Other studies dealt with hedges under headings such as evidentiality (Chafe, 1986), mitigation (Labove & Fanshel, 1977), indirectness (Tannen, 1982; Hinkel, 1997), tentativeness (Holmes, 1983) and vagueness (Channell, 1994). (P.4/YE/AL/S.2.2.1/Pr.1/L.27-30/Pg.39)*

Example (4) is a multiple non-integral citation, in which the name of the cited author is used in parentheses and the general noun Other studies is used as a Subject of the clause.

The Subject is also used by means of a pronoun that refers back to the cited author as in example (5).

- (5) *He added that the culture and the environment need to translated to fit the target user. (P.20/JO/IT/S.2.3.5/Pr.7/L.1846-1847/Pg.119)*

The Subject in example (5) is the pronoun He that refers back to the name of a cited author which was mentioned previously in the text.

The Subject is also used as an abstract noun, as in example (6).

- (6) Consequently, **distance learning** has become a popular practice all over the world (Ruhig, 2002). (P.13/JO/IT/S.2.1/Pr.1/L.47-48/Pg.26)

In example (6), the ‘Subject’ of the clause in the non-integral citation is *distance learning* which is an abstract noun.

The subject of the clause can be also an embedded clause that is a part of a lengthy noun, as in example (7).

- (7) Another example of science **that faces large quantities of data** is climate model computations [8]. (P.15/IT/PA/S.2.2.2/Pr.2/L.59-60/Pg.14)

In example (7), the citation is a simplex clause, in which the ‘Subject’ of the clause is represented by the nominal constituent *Another example of science that faces large quantities of data*. Together with this nominal constituent, the embedded clause *that faces large quantities of data* functions as the ‘Subject’ of the clause. Thus, the ‘Subject’ constituent in the MOOD component of the clause is essential in full declarative clauses. The subject in such Mood classes can be either the cited author in integral citation, a lengthy noun where the cited author is a part of it, a pronoun referring back to the cited author, a general noun, an abstract noun, or an embedded clause. These are summarized in Table 4.4.

Table 4.4

*„Subject” Constituent in a Full Declarative Clause*

Mood Class	Subject
Full Declarative Clause/s	1) The cited author
	2) A general noun
	3) An abstract noun
	4) A lengthy noun (the cited author is a part of it)
	5) An embedded clause as a part of a nominal constituent
	6) A pronoun

The most distinguished aspect in the ‘\_Subject’ of the clause is the role of the cited author. The name of the cited author occurred either alone, a part of a lengthy noun or it was replaced by a pronoun. The frequency and the percentage of the cited author as a ‘\_Subject’ in the citations used in the literature review chapter of AL and IT are summarized in Table 4.5 below.

Table 4.5

*Role of the Cited Author as a Subject*

	<b>Applied Linguistics</b>	<b>Information Technology</b>	<b>Total</b>
Frequency	1,925	923	
Percentage	67.59	32.40	2,848

Table 4.5 demonstrates that the percentage of using the cited author as a ‘\_Subject’ was higher in the citations of the literature review chapter of AL (67.59%). This reveals the dependence of the EFL Arab postgraduates in the Applied Linguistics on integrating the name of the cited author with the structure of the clause. This finding is in accordance with the conventions of the soft domain like the AL, where the name of the cited author is emphasized. On the other hand, the role of the cited author in the citations of the literature review chapter of IT was less emphasized. This was evident in the low percentage (32.40) of the role of the cited author as a ‘\_Subject’. Such a finding also corresponds with the general conventions and norms followed in the disciplines of the hard domain such as the IT, whereby the role of the cited author is given less prominence.

After discussing the first constituent of the clause ‘\_Subject’ that is a part of the MOOD component in the declarative clause under the interpersonal meanings, in this

subsection, the focus is on the second constituent of the MOOD that is the Finite. Hence, the second essential constituent of the MOOD in full declarative clauses is the Finite which is the verbal type element. The functional role of the Finite in the clause is to make the proposition definite and arguable. Consequently, the Finite is used to express modalisation (probability/certainty) and modulation (obligation and/or inclination). Example (1) demonstrates the Finite as a constituent in the clause.

- (1) *These controls **may not** reduce the effect of vulnerability, but they **can** reduce natural risk in different ways [9].*  
(P.16/YE/IT/S.2.4.1/Pr.7/L.146-148/Pg.20)

In example (1), the citation is a clause complex because it consists of two clauses. In the first clause, the Finite may is used, whereas in the second clause, the Finite can is used.

(2)

These controls	may not	reduce the effect of vulnerability
Subject	Finite	
MOOD		RESIDUE

(3)

They	can	<i>reduce natural risk in different ways [9].</i>
Subject	Finite	
MOOD		RESIDUE

Table 4.6 below demonstrates the frequency of using the Finite constituent in the citations of the literature review chapter of AL and IT theses. Table 4.6 demonstrates how modality is used in the citations of the literature review chapters of AL and IT. Based on the findings, it is clear that the citations of the literature review chapters of AL include a higher percentage of modalisation (58.43%) and modulation (66.66).

Table 4.6

*Finite in the Citations of the Literature Review of AL and IT Theses*

Modality	Applied Linguistics		Information Technology		Total
	F	%	F	%	
Modalisation (probability/certainty)	419	58.43%	298	41.57%	717
Modulation (obligation/inclination)	136	66.66%	68	33.33%	204
Total Finite	555	60.26%	366	39.74%	921

On the other hand, the citations in the literature review chapters of IT have a lower percentage of modalisation (41.57%) and modulation (33.33%). These findings probably reflect the effect of the tenor that is represented by EFL Arab postgraduates. Those who belong to the academic community with the soft domain tended to use a higher frequency of modality. On the other hand, those, who belong to the academic community of the hard domain, used modality with a lower frequency in citations. The Applied Linguistics is a soft domain that is based on the strength of the arguments. Therefore, EFL Arab postgraduates used the *Finite* constituent to reveal their stance of probability and certainty towards the citations.

On the other hand, IT is based on facts rather than arguments; consequently, modality was used with a lower percentage. Although the PhD theses of AL and IT were produced by EFL Arab postgraduates who share a similar social, cultural and educational backgrounds, their performance related to modality usages was different in terms of the number and the percentage. Thus, using modality was affected by tenor as a register variable. In other words, each field has its own readers who expect to receive a specific kind of expressions related to probability and certainty. Another possible reason for using modality with a higher percentage in the literature of AL can be associated with the high density of citations.

When there is a group of verbal elements, the Finite constituent is the first part of the verbal group, as in example (4) below.

- (4) *It **can be** used for different purposes (Ling, 2005; Thurlow, 2003). (P. 10/JO/AL/S.2.5.1/Pr.4/L.1723/1724/Pg.107)*

In example (4), the verbal group consists of many elements; therefore, can which is the first part of the verbal group is the Finite constituent.

In some examples, there is no explicit Finite constituent in the clause; rather the Finite constituent is fused with the predicator, as in example (5).

- (5) *Sadiq (2010, p. 33) **indicates** that the language of the Holy Qurān is full of numerous examples of ellipsis. (P.11/LI/AL/S.2.4.2.3.3/Pr.2/L.1179-1180/Pg.64)*

In example (5), the citation is a clause complex of two clauses. In the first clause (Sadiq (2010, p.33) *indicate*...), there is no explicit Finite constituent; rather the Finite is fused with the Predicator indicate. Hence, the Finite constituent is of two kinds that are used in the clauses of the citations. *Temporal Finite Verbal Operators* anchor the proposition by reference to time. They give tense to the finite, including present, past or future. The examples below demonstrate the usages of Finite as a Temporal Finite Verbal Operator:

- (6) *IT infrastructure **consists** of IT architecture, processes, and skills (Papp, 1995). (P. 17/JO/IT/S.2.2/Pr.9/L.123/Pg.23)*

- (7) *They then **proposed** fine-tuning strategies for these RTO component parameters. (P.7/SY/IT/S.2.3.1.1/Pr.17/L.552-553/Pg.45)*

- (8) *As such, the system **will affect** older users who have a lot of experience (Venkatesh et al., 2003). (P.13/JO/IT/S.2.11.10/Pr.8/L.990-991/Pg.78)*

In examples (6) and (7) which include an implicit Finite constituent that is fused with the predicator, the finite verbal operator in consists refers to the simple

present in example (6), and the finite verbal operator‘ in *proposed*‘ in example (7) refers to the simple past. However, in example (8), the finite verbal operator‘ represented by *will*‘ refers to the future tense.

The other kind of Finite is called Finite Modal Operators‘. These kinds of Finite‘ make the proposition arguable through allowing the writer to adopt a stance towards the citation. In other words, the writer can express his/her attitude through either modalisation involving probability and/or usuality or modulation involving obligation and/or inclination. This stance can range from high, though median to low. The examples below illustrate such a usage of the Finite Modal Operators‘ to express modalisation (probability and certainty).

- (9) *Like Saussure, Chomsky argued that the structural characteristics of language **must** be the linguists., primary object of concern.* (P.1/IR/AL/S.2.3.1/P.3/L.85/87/P.34)
- (10) *When it is correctly implemented, it **will** enable constant improvement in performance and decision making [74, 79, 80].* (P.16/YE/IT/S.2.2/P.4/L.71-73/P.17)
- (11) *Filter and wrapper approaches **may** be further classified into five main methods: forward selection, backward elimination, forward/backward combination, random choice and, finally, instance based method (Basiri, Aghaee & Aghdam, 2008 and Kanan, Faez & Taheri, 2007).* (P.8/IR/IT/S.2.2.2/Pr.2/L.698-701/Pg.47)

In example (9), the Finite Modal Operator must‘ is used to express the stance of the citing writer towards the citation, which expresses a high stance of probability. Similarly, the Finite Modal Operator will‘ in the clause of the citation (10) expresses a median stance of probability. The Finite may‘ also reveals probability which expresses a low stance of certainty on the part of the citing writer. Consequently, the Finite Modal Operators‘ were used to illustrate how the EFL Arab postgraduates

revealed their stance of probability towards the citations. Between positive and negative clauses, three degrees of probability were found, including high, median and low, as demonstrated in Figure 4.1.

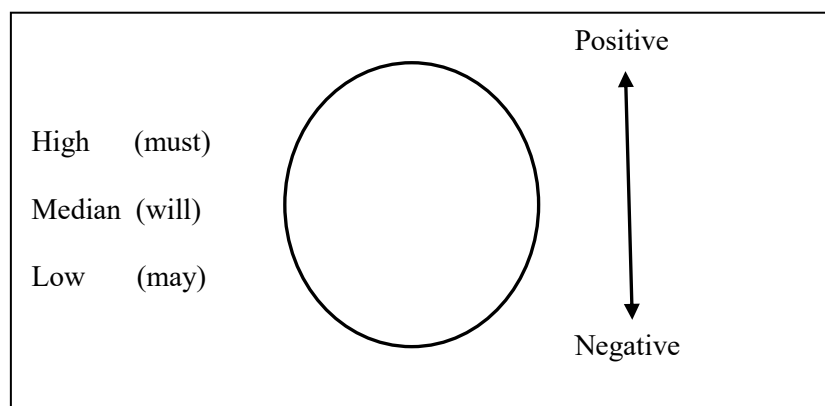


Figure 4.1. Finite modal operators to express degrees of probability

Finite Modal Operators are not limited only to Modalisation to express probability, but they are also employed to express Modulation with different rates of stance ranging from high through median and low. Modulation included expressing either obligation and/or inclination, as in examples (12) and (13).

(12) *Approximately 70,000 employees of the Ministry **must** participate in this program (ICDL foundation, 2007). (P.13/JO/IT/S.2.10/P.7/L.603-605/P.56)*

(13) *Such type of reflection-on-action **should** be encouraged and practiced collectively and in groups in universities or centers of higher education (Akbari, 2007). (P.5/YE/AL/S.2.2.9/P.1/L.306/308/P.45)*

In example (12), the Finite Modal Operator must is used to express a high stance of obligation on the part of the citing writer. Similarly, the Finite Modal Operator should in example (13) expresses a median stance of obligation. Thus, the Finite Modal Operators were also used in modulation to indicate the writers' stance of obligation towards the citations, as demonstrated in Figure 4.2.

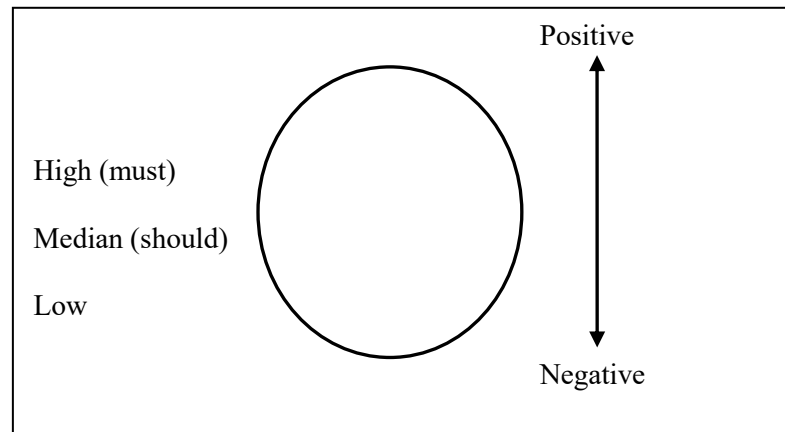


Figure 4.2. Finite modal operators to express degrees of obligation

These Finite Modal Operators are also used to express inclination, as in example (14).

- (14) *Some researchers, such as Ahmed et al. (2009) **would** argue that many of the previous studies focused mainly on the USA when representing the Western world. (P.20/JO/IT/S.2.2.3/P.21/L.1350-1352/P.94)*

In example (14), the Finite constituent *‘would’* is used in the clause of the citation in order to express the citing writer’s stance of modulation. It expresses a median degree of inclination on the part of the citing writers represented by EFL Arab postgraduates in AL and IT.

Finite constituents can carry another semantic feature which is *polarity*. This polarity either makes the proposition positive or negative. Thus, the Finite Modal Operators are also used to make either positive or negative polarity, as in the example (15).

- (15) *This difficulty arises when EFL writers **cannot** distinguish between opinions from facts (Hyland & Milton, 1997). (P.4/YE/AL/S.2.7/P.5/L.728-729/P.73)*

In example (15), the finite *‘can’* was used to make the proposition negative. However, in non-finite clauses, there is no *‘Finite’* constituent. This includes perfective and imperfective clauses as in examples (16) and (17).

- (16) *They analyzed the data **using Structural equation modelling.***  
(P.20/IT/Jo/S.2.2.1/Pr.83/L.810-811/Pg.65)
- (17) ***To examine Hybrid genres,** Bhatia (2010a) examined a number of annual reports that were taken from companies in Hong Kong.*  
(P.2/JO/AL/S.2.3.2/P.5/L.790-791/P.53)

In conclusion, *Finite* constituents were either explicitly used or implicitly fused with the predicator. These *Finite* constituents significantly played several functional roles represented by indicating tense, making the proposition arguable, and implying polarity. The high density of citations and the effect of the academic community to which the tenor belongs were the main reasons for using the Finite Modal Operators in the citations of AL more than the IT. Establishing the research background and indicating gaps required using Finite Modal Operators in order to show the stance of the writers towards the citations. This could be another reason that motivated EFL Arab postgraduates in AL to use Finite Modal operators more than the IT. Although Information Technology is a hard domain that is based on facts, Finite Modal Operators were also used in modalisation and modulation to show the stance of probability, obligation and inclination. However, using modality in the citations of the literature review chapters of PhD theses does not reflect that EFL Arab postgraduates' performance is appropriate unless there is a comparison between the original source of the information and the citation. This comparison might illustrate whether modality belongs to the cited author (author of the original source) or the citing writer (EFL Arab postgraduates).

#### 4.2.1.2.2 RESIDUE Component of the Clause

The second component of the clause is RESIDUE, which is less essential to the arguability of the clause. Similar to MOOD, the RESIDUE includes more than one constituent, including a *Predicator*, a *Complement* and an *Adjunct*.

The predicator, which is the lexical part of the verbal group, carries the lexical meaning and specifies the type of the processes that is involved in the clause of the citation, as demonstrated in examples (1) and (2).

(1) *Milad et al. (2012) **evaluated** BA and Skipjack performance.*  
(P.9/IR/IT/S.2.3.3.1.2/Pr.7/L.667/Pg.57)

(1) *Clark (2005) **provides** a summary of the beliefs about the causes of writing apprehension among freshman students at Chandler-Glibert Community College.* (P.3/JO/AL/S.2.5/Pr.9/L.1173-1174/Pg.74)

In both examples (1) and (2), the predictor that is a constituent of the RESIDUE is evaluated in example (1) and provides in example (2). When there is no explicit finite in the clause, the finite is fused with the predicator. For example, in example (1), there is no explicit Finite constituent used since it is fused with the predicator evaluated. Therefore, when analysing the clause based on the constituents used, the predicator evaluated is divided into two parts; half a part is in the MOOD component of the clause, whereas the other part is in the RESIDUE component of the clause, as in example (3) below.

(3)

Argamon et al. (2005)	analysed		the texts of the applied science, arts, commerce, and leisure.
Subject	Finite	Predicator	Complement
MOOD		RESIDUE	

(P.4/YE/AL/S.2.5.2/Pr.4/L.571-572/Pg.65)

In example (3), the predicator analysed is fused with the finite that is implicitly used. Hence, the predicator analysed plays the functional roles of two constituents: a Finite and a Predicator. The Complement constituent that follows the predicator is the second constituent of the RESIDUE, as example (4) clarifies.

(4) *Shannon (1949) deduced **the theoretical principles of confusion and diffusion.*** (P.9/IT/IR/S.2.1.1/Pr.1/L.98-99/Pg.16)

In example (4), *‘the theoretical principles of confusion and diffusion’* is a part of the RESIDUE component and plays the function of the *‘Complement’* constituent. In some examples, the cited author in the integral citation, when used as a part of a lengthy noun, can take the functional role of the *‘Complement’* constituent in active clauses, as in example (5).

- (5) *Consequently, the present study will adopt **Faerch and Kaper’s** (1983a) classification of OCSs together with some of the OCSs included in their taxonomy as will be explained later in Section 2.6. (P.19/YE/AL/S.2.5.4.3/Pr.6/L.445-447/Pg.26)*

In example (5), the cited author (...*Faerch and Kaper (1983a)*...) is a part of a lengthy nominal element which functions as a *‘Complement’* constituent of the clause. However, when using passive clauses, the *‘Complement’* constituent becomes a *‘Subject’* and the *‘Subject’* is turned into another constituent called an *‘Adjunct’* under the RESIDUE component, as in example (6).

- (6) *As discussed earlier, **language anxiety** is argued by Krashen’s (1985) Affective Filter Hypothesis to be one of the affective factors that influence the acquisition of a second language. (P.19/YE/AL/S.2.12/Pr.1/L.1070-1073/Pg.63)*

In example (6), in the citation which includes more than one clause, the clause (.....*language anxiety is argued by Krashen’s (1985) Affective Filter Hypothesis*....) is a passive clause, where the *‘Complement’* constituent *‘language anxiety’* is turned into a *‘Subject’* complement, whereas the *‘Subject’* *‘Krashen’s (1985) Affective Filter Hypothesis’* in active clauses is turned into an *‘Adjunct’* constituent under the RESIDUE component. On the other hand, the cited author as a part of a lengthy noun becomes a *‘Subject’* under the MOOD element instead of a *‘Complement’* constituent under the RESIDUE when used in passive clauses as in example (7).

(7) However, **Chen's (2009) study** is criticized for investigating only one background variable of his respondents, i.e. language proficiency. (P.19/YE/AL/S.2.8.1/Pr.4/L.663-665/Pg.38)

In example (7), the cited author which is a part of a noun phrase that was a Complement constituent in the active is turned into a Subject constituent under the MOOD component in passive. In summary, the Complement is another constituent of the RESIDUE component that is used in the full declarative clauses and can add further information to make the information clear. Using the cited author as a Complement constituent of the clause is what adds another distinguishing element to the integral citation under the interpersonal meanings.

Table 4.7

*Role of the Cited Author as a Complement*

Author's role	Applied Linguistics		Information Technology		Total
	Frequency	%	Frequency	%	
Complement	140	66.66	70	33.33	210

A distinguished aspect of the integral citation under the interpersonal meanings is the role of the cited author as a Complement constituent that is classified under the RESIDUE component of the clause. Integrating the name of the cited author with the structure of the clause/s of the citation to function as a Complement constituent probably reflects the tendency of the EFL Arab postgraduates to give the cited author a prominent role in order to convince the reader of the credibility of the citation, particularly when the cited author is an expert in the field. In other words, AL as a soft domain had the highest occurrence and percentage of the role of the cited author as a Complement in the clause. The density of citation in AL also affected the higher percentage of the role of the cited author as a Complement.

The Adjunct‘ is another constituent of the RESIDUE that is either adverbial or prepositional, which adds additional information that is not essential to the clause. Thus, the Adjunct‘ is not nominal, as in example (8).

- (8) *Also their simulation results showed dramatic improvement **in the TCP-FeW performance**.* (P.7/SY/IT/S.2.3.2.1/Pr.13/L.888-889/Pg.61)

In example (8), the prepositional constituent in the TCP-FeW performance‘ is a constituent under the RESIDUE component which functions as an Adjunct‘.

The cited author in integral citation takes the role of the Adjunct‘, as in examples (9), (10), and (11).

- (9) *TAM2 has also been applied **by Lee et al. (2003)** to examine students' attitude towards using distance learning system, and students' acceptance of the courses delivery system (Shen et al., 2006).* (P.13/JO/IT/S.2.11.2/Pr.1/L.691/693/Pg.61)
- (10) ***In Buitkiene's (2008) own words**, hedges are "a means of toning-down utterances and statements in order to reduce the riskiness of what one says, to mitigate what may otherwise seem too forceful, to express politeness or respect to strangers and superiors" (p.17).* (P.12/IR/AL/S.2.13/Pr.10/L.992-995/Pg.67)
- (11) ***In [110]**, a dynamic placement algorithm was proposed that takes into account the dynamicity of sites in the data grid, since a site can at any time leave the grid and possibly join again later.* (P.15/PA/IT/S.2.4.8/P.11/L.545-547/P.40)

In example (9), the citation is a clause complex. In the first clause, which is used in the passive, the name of the cited author occurred as a part of a prepositional constituent and is integrated with the structure of the clause to function as an Adjunct‘ constituent under the RESIDUE component of the clause. In example (10), the citation includes the name of the cited author that is a part of a prepositional constituent to function as an Adjunct‘. In example (11), however, although it is a citation with no cited author being explicitly integrated, the cited author is expressed by the numbering system [110] that functions as an Adjunct‘ constituent. Hence, the

cited author has another functional role under the interpersonal meanings that is called an *Adjunct*.

Table 4.8

<i>Role of the Cited Author as an Adjunct</i>					
Role of the author	Applied Linguistics		Information Technology		Total
	Frequency	%	Frequency	%	
Adjunct	601	73.47	217	26.52	818

In Table 4.8, the findings show that the cited author has the role of the *Adjunct* when used as a part of a prepositional constituent. Similar to the functional role of the cited author as a *Subject* and a *Complement*, the functional role of the cited author as an *Adjunct* dominated the citations in the literature review chapter of AL (73.47%), compared with (26.52%) in IT. This signifies the importance of the name of the cited authors who are experts in the field when citing information. In other words, since AL is a soft domain in which the cited author is given a prominent role, EFL Arab postgraduates used citations in which the cited author has a higher frequency of roles.

Adjuncts that add information to the interpersonal meanings comprise two types: Modal Adjuncts and Comment Adjuncts. Modal Adjuncts are also constituents that add interpersonal meanings to the clause. Only two types of Modal Adjuncts including Mood Adjuncts and Comment Adjuncts were found in the citations of EFL Arab postgraduates of AL and IT theses. Mood Adjuncts are considered as a part of the MOOD component of the clause which reveal a meaning that is closely related to the meaning of the Finite Modal Operators. In other words, the Mood Adjuncts were used to express modalisation (probability and usuality). For more clarification, in example (12) below, the Mood Adjunct *likely* expresses the stance of probability,

whereas the citation in example (13) includes the Mood Adjunct *usually* to reveal the usuality of the action.

- (12) *Furthermore, women are more **likely** to use more standard forms in speech than men (Coates, 1993; Holmes, 2008; Trudgill, 1983). (P.10/JO/AL/S.2.3.1.3/P.9/L.566-567/P.52)*
- (13) *For example, Jones and van Rijsbergen (1976) showed that 250 queries are **usually** acceptable while Leung suggests that 20 queries are enough (Leung & Ip, 2000). (P.18/IR/IT/S.2.1.6/P.B 12/L.337-339/P.34-35)*

In example (12) the Mood Adjunct *likely* is used by the citing writers represented by EFL PhD Arab postgraduates to reveal a stance towards the citation. This stance expresses a median degree of probability. In example (13), the citation contains the Mood Adjunct *usually* to express the citing writer's stance of usuality towards the reported information that is a median stance of frequency.

Figure 4.3 below demonstrates the number of Mood Adjuncts used in Modalisation to reveal either probability or frequency in the literature review chapters of AL and IT theses. (170) Mood Adjuncts are used in the citations of the literature review chapter of AL and IT theses. (75.29 %) of Mood Adjuncts are used in the literature review chapter of AL theses, whereas only (24.71%) are used in the literature review chapter of IT theses.

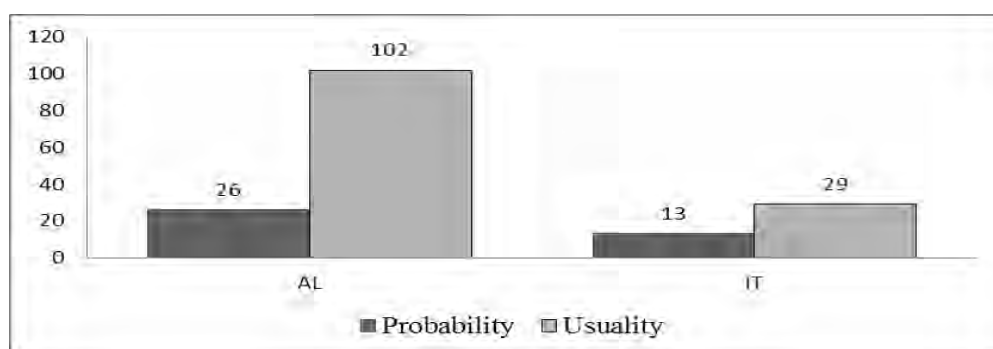


Figure 4.3. Mood Adjuncts in the literature review chapter of AL and IT These

The majority of these Mood Adjuncts express modalisation (frequency); (77.86%) are used in the citations of the literature review chapter of AL, whereas (22.14%) are used in the citations of the literature review of IT theses. This is followed by Mood Adjuncts used to reveal probability. The similarity in using a higher number of Mood Adjuncts to express usuality, followed by probability, reveals the effect of tenor on using modality. In other words, in spite of the different fields to which AL and IT belong, EFL Arab postgraduates were similar in using a higher frequency of Mood Adjuncts to express usuality followed by probability.

The attempt of EFL Arab postgraduates to follow the style of the sources they read can have an effect on using Mood Adjunct. In addition, meeting the expectations of readers in AL may result in having a higher number and percentage of Mood Adjuncts to reveal usuality compared with the low use in IT. However, the low use of Mood Adjuncts to reveal a stance of probability in both disciplines can be due to the low level of knowledge in using such expressions by EFL Arab postgraduates. On the other hand, the high use of usuality can be due to its association with teaching English tenses which are focused on in the educational system of teaching English in the Arab countries.

The stance of the student writers to reveal probability towards the citations is of different degrees ranging from high through middle to low, as in examples (14), (15), and (16).

- (14) *The relevant descriptors to this thesis are **certainly** the MPEG-7 colour descriptors that include scalable colour descriptor, colour layout descriptor and dominant colour descriptor (Chang, Sikora & Purl, 2001; Manjunath, Ohm, Vasudevan & Yamada, 2001). (P.18/IR/IT/S.2.1.2/Pr.3/L.87-91/Pg.22)*

- (15) *This substitution is **probably** made to achieve brevity by omitting insignificant details that could be retrieved from the story (Al-Salem 2008, p. 181). (P.11/LI/AL/S.2.4.2.3.2/Pr.6/L.1161-1163/Pg.64)*
- (16) *In [110], a dynamic placement algorithm was proposed that takes into account the dynamicity of sites in the data grid, since a site can at any time leave the grid and **possibly** join again later. (P.15/PA/IT/S.2.4.8/Pr.11/L.545-547/Pg.40)*

In examples (14), (15) and (16), the Mood Adjuncts *\_\_certainly*‘, in example (14), *\_\_probably*‘ in example (15), and *\_\_possibly*‘ in example (16) are used to express the citing writers‘ (EFL Arab postgraduates) certainty and probability towards the citations. Expressing probability ranged from high certainty through using *\_\_certainly*‘ in example (14), to a median probability through using the Mood Adjunct *\_\_probably*‘ in example (15) and a low stance of probability by using the Mood Adjunct *\_\_possibly*‘ in example (16).

Similarly, Mood Adjuncts are also used to reveal the student writer’s stance of frequency towards the citation. This stance was of different grades, ranging from high through median to low as in examples (17), (18), and (19), respectively.

- (17) *Their senses and meanings **always** overlap, and the scholars define them in various ways (Sun, 2012). (P.11/LI/AL/S.2.5/Pr.1/L.1201-1202/Pg.65)*
- (18) *Akar and Louhiala-Salminen found that communicators **usually** fax back the same fax adding their comments on it. (P.2/JO/AL/S.2.3.1/Pr.4/L.738-740/Pg.51)*
- (19) ***Sometimes**, they tend to mix writing apprehension with other terms (Hettich, 1994; Rose, 1980). (P.3/JO/AL/S.2.3.2/Pr.1/L.249-250/Pg.31-32)*

The Mood Adjuncts *\_\_always*‘ in example (17), *\_\_usually*‘ in example (18), and *\_\_sometimes*‘ in example (19) reveal the citing writer’s stance of frequency towards the citation. The stance of frequency is high by means of the Mood Adjunct *\_\_always*‘, median by using the Mood Adjunct *\_\_usually*‘, and low through using the Mood

Adjunct *‘sometimes’*. In Figure 4.4, there is a demonstration of the Mood Adjuncts of probability and frequency and their different degrees that were used in the literature review chapter of Applied Linguistics and Information Technology.

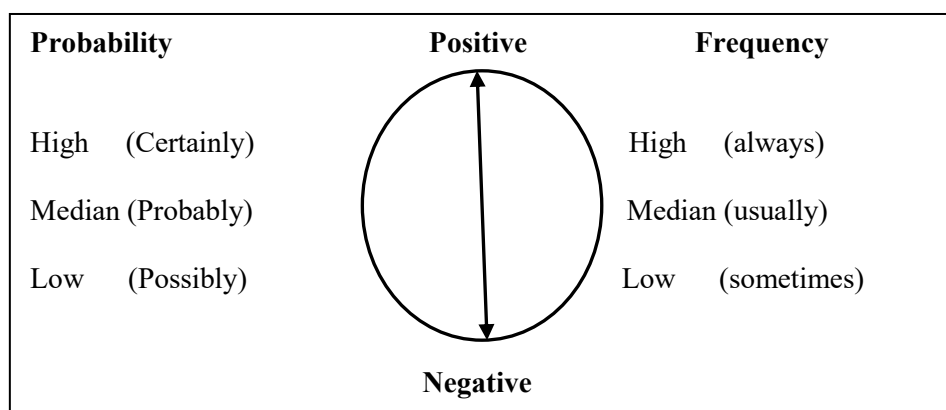


Figure 4.4. Mood adjuncts of probability and frequency

Mood Adjuncts are also used to express other aspects of stance that is adopted by the citing writers (EFL Arab postgraduates). These included expressing presumption through using the Mood Adjunct *‘clearly’*, as in example (20).

(20) *On the other hand, Hettich (1994) states that writing apprehension has not been **clearly** defined.* (P.3/JO/AL/S.2.3.2/Pr.1/L.247-248/Pg.31)

Another type of Mood Adjunct is used to express time by means of using the adverbial *‘still’*, as in example (21).

(21) *Class was **still** a determining factor, but women from the working classes and the middle classes behaved more similarly to each other than to men from the same social class as themselves (see also Horvath, 1985).* (P.1/IR/AL/S.2.7.1/Pr.5/L.502-504/Pg.53-54)

Mood Adjuncts can express degree through using the adverbial *‘approximately’* as in example (22).

(22) *TCP DOOR can significantly enhance TCP throughput by an average of **approximately** 50%, as shown by their simulation results.* (P.7/SY/IT/S.2.3.1.1/Pr.11/L.502-503/Pg.43)

Other Mood Adjuncts can also express intensity through using the adverbials *‘simply’* in example (23), and *‘only’* in example (24).

- (23) *The authors utilize a hold-out approach as a measure to judge which feature to delete at each iteration instead of a measure to build **simply** on one dataset, gradient-based measure or Fisher correlation score.* (P.8/IR/IT/S.2.2.2/Pr.24/L.982-985/Pg.60)
- (24) *Other researchers noted that TAM just focuses **only** on extrinsic motivation, not intrinsic motivation (Davis et al., 1989).* (P.13/JO/IT/S.2.11.1/Pr.4/L.666-667/Pg.60)

Figure 4.5 presents a demonstration of the number of Mood Adjuncts used in the literature review chapters of AL and IT theses. (491) Mood Adjuncts are used in the citations of the literature review of AL and IT by EFL Arab postgraduates. (n=310) (63%) Mood Adjuncts are in the literature review chapter of AL theses, whereas only (n=181) (37%) Mood Adjuncts are used in the literature review chapter of IT theses. Since Applied Linguistics is based on arguments, EFL Arab postgraduates used a higher percentage of Mood Adjuncts to reveal their stance toward the citations. On the other hand, EFL Arab postgraduates in IT used a lower percentage of Mood Adjuncts since they belong to a discourse community that prefers facts rather than arguments.

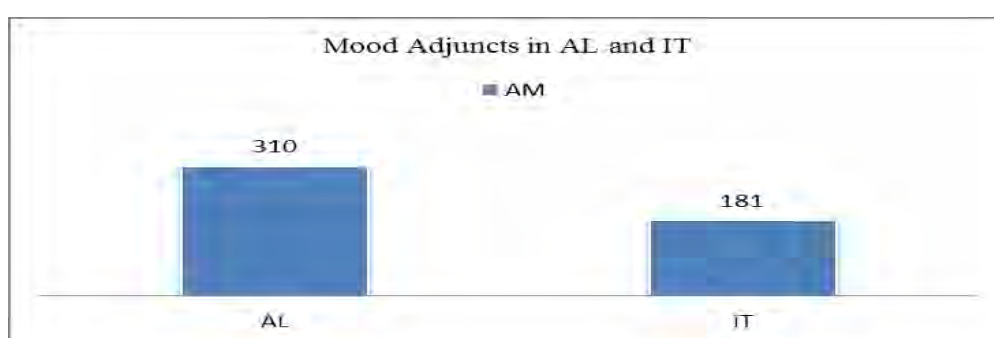


Figure 4.5. Mood adjuncts in the literature review of AL and IT theses

Although Mood Adjuncts are secondary rather than basic constituents of the clause, they play significant functional roles in revealing different aspects of the citing writer's stance towards the citation. However, in spite of the importance of adopting

a stance in the clauses of the citations, Mood Adjuncts were less used in comparison with the ‘Finite’ constituents which also carry similar stances. This can be attributed to the low level of knowledge in using Mood Adjuncts by EFL Arab postgraduates. Another possible reason is using Finite Modal Operators, such as ‘must, should, will, can, could’, in the tenses of English which the educational systems in the Arabic countries focus on. Thus, the educational background of EFL Arab postgraduates probably has an influence on the use of the Mood Adjuncts, mainly the Finite modal operators.

Adjuncts can add to the interpersonal meanings through using Comment Adjuncts. These types of Adjunct were used to express the student writer’s stance about the whole clause. Comment adjuncts can occur in an initial position or directly after the ‘Subject’. These adjuncts were used to express different types of meanings. For example, some Comment Adjuncts are used to express the assertion through using the adverbials ‘importantly’ in example (1) and ‘actually’ in example (2).

- (1) ***Importantly**, Qiume"s does not mention any information about the questionnaire in terms of its developer, or how it was developed and designed. (P.19/YE/AL/S.2.8.1/Pr.12/L.745-747/Pg.42)*
- (2) ***Actually**, this problem cannot be using low-level features only (Boykov & Jolly, 2001; Cour & Shi, 2007; Ferrari, Tuytelaars & Gool, 2004). (P.18/IR/IT/S.2.2.2/Pr.1/L.528-530/Pg.43)*

Some Comment Adjuncts express how desirable something is through using the adverbial ‘unfortunately’, as in example (3).

- (3) *Nevertheless, UTAUT incorporate the constructs from TAM and has received widespread support but **unfortunately** was not published like TAM (Srite, 2006). (P.14/JO/IT/S.2.5.6/Pr.1/L.847-848/Pg.74-75)*

Some Comment Adjuncts reveal the validity of something through using the adverbials *generally* in example (4) and *broadly speaking* in example (5).

- (4) **Generally**, Tarone's interactional perspective views OCSs as cooperative in nature. (P.19/YE/AL/S.2.5.3.2/Pr.2/L.326/Pg.18)
- (5) **Broadly speaking**, while innovation is defined as exploring something new which has existed before, quality is seen as a dynamic threshold which firms have to meet to satisfy customers (Cho & Pucik, 2005) (P.17/JO/IT/S.2.3/Pr.6/L.393-395/Pg.36)

Some Comment Adjuncts are employed to express how something is expected through using the adverbial *surprisingly*, as in example (6) below.

- (6) This is worrying because as demonstrated by Hubbard [65] and Allen [45], human experts **surprisingly** make consistent types of errors in their judgements about uncertainty and risk, and decision makers might have conflicting opinions about the criticality of an asset. (P.16/YE/IT/S.2.5.5/Pr.3/L.594-597/Pg.46-47)

Figure 4.6 demonstrates the number of using Comment Adjuncts in the literature review chapter of AL and IT theses by EFL Arab postgraduates.

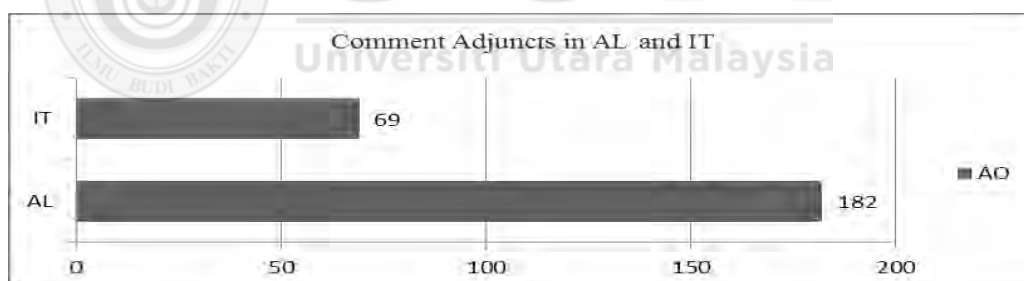


Figure 4.6. Comment adjuncts in the literature review of AL and IT theses

Figure 4.6 demonstrates that 251 Comment Adjuncts are used in the citations of the literature review chapter of AL and IT theses. (n=182) comment Adjuncts (73%) are in the citations of the literature review chapter of AL, whereas (n=69) (27%) Comment Adjuncts are used in the citations of the literature review chapter of Information Technology. This shows that the literature review chapters of AL have comment Adjuncts more than IT. These findings imply two significant issues. First, the writers in each domain probably try to attract the readers' attention by using the

adjuncts that are expected by their readers. In other words, the readers of each academic community possibly have certain ideology when writing. Second, unfamiliarity of EFL Arab postgraduates in IT of using Comment Adjuncts might be the reason for the lower occurrence of these types of Adjuncts in their citations.

#### **4.2.1.3 Summary of Research Question One: Objective One**

The findings related to objective one of research question one focused on analysing how the clause/s of the citations are structured to reveal the interpersonal meanings. This involved exploring the Mood Class of the clauses, where the full declarative mood dominated the clauses of the citations in the literature review chapters of the 20 theses. The components of the clauses in the full declarative mood class consisted mainly of two parts, which are the MOOD and the RESIDUE.

The MOOD consisted of two constituents which are the subject and the finite. In some cases, the Finite constituent was fused with the predicator that is a constituent of the RESIDUE part of the clause. The predicator indicates the type of the process used in each clause. The other two constituents of the clause were the complement and the adjunct. The cited author in the integral citation takes the functional roles of three constituents including a Subject, a Complement and an Adjunct. In revealing a stance towards the citations, finite modal operators as Finite constituents and adverbials as Mood adjunct were used to reveal either modalisation or modulation. Modalisation included probability and usuality, whereas modulation included obligation and inclination. The stance that was expressed ranged from a high stance through median to low. Comment Adjuncts were another type of Adjuncts which were used in revealing the citing writer's stance towards the citation.

#### 4.2.2 RQ 1: Objective Two (Part One) (Experiential Meanings)

The *ideational meanings* are composed of two aspects: *experiential meanings* and *logical meanings*. In this section, the findings are associated with the Transitivity System that is concerned with the experiential meaning. These experiential meanings are implied in the Transitivity System to reflect the real world. In other words, the Transitivity System is reflected by what the researchers in their studies act, think, feel, understand, say, behave, and possess.

The following subsections involve the discussions of four issues related to how the experiential meanings were revealed in the clauses of the citations: the processes types, the functional role of the cited author associated with the processes types, Circumstantial, and the functional role of the cited author associated with the Circumstantial.

##### 4.2.2.1 Processes Types

Based on the analysis of the clauses in the citations which were extracted from the literature review chapter of the 20 PhD theses in IT and AL disciplines, the processes demonstrated in Figure 4.7 are used by EFL Arab postgraduates.

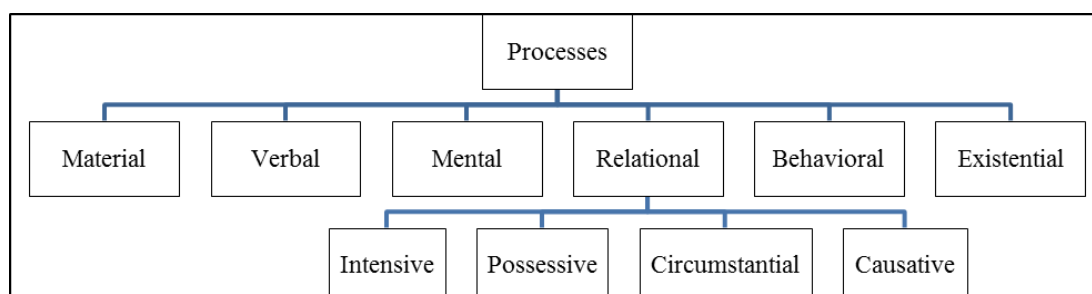


Figure 4.7. Processes in the literature review of AL and IT theses

A clause represents a process which reflects the reality; this reality consists of feelings, beliefs, happenings, doings and other actions which are represented by the Transitivity system and expressed through the grammar of the clauses. For example, the processes used in examples (1), (2), (3), (4), and (5) reflect different representations.

- (1) *He **added** that speakers **send out** social signals that are used as source of information about the speaker's social characteristics.* (P.1/AL/IR/S.2.2/Pr.1/L.20-21/Pg.31)
- (2) *Each site **has** a degree of autonomy, **is** capable of executing a local application, and also participates in the execution of a global application [21].* (P.15/IT/PA/S.2.3.1/Pr.4/L.130-132/Pg.18-19)
- (3) *Klaudy (2001, p.80) **regards** explication as „he technique of making explicit in the TT information that is implicit in the ST“.* (P.11/AL/LI/S.2.5.2.14/Pr.1/L.1341-1342/Pg.73)
- (4) *Additionally, Ajzen (1985) **noted** that the theory is limited by what is called correspondence.* (P.14/IT/JO/S.2.5.2/Pr.5/L.683-684/Pg.65)
- (5) *He **analyzed** the effect of these cultural values in the British and Malaysian websites.* (P.20/IT/JO/S.2.2.3/Pr.21/L.1357-1358/Pg.94)

In each of the examples (1), (2), (3), and (4), the citations include either one clause a simplex clause or more than one clause a clause complex. In each clause, one process is used to reveal the experiential meanings of what is going on in the real world. In example (1), three clauses are used within one citation. In the first clause, the process added implies continuing speaking. Hence, such a type of processes is called verbal. In the second clause in the same citation, the material process send out reveals the act of doing something. In example (2), the citation also has several clauses. In the first clause, the process has is used as the relational possessive process. In the second clause of the same citation, the process is is used as the relational intensive process. In example (3), regards is a mental process. Similarly, noted is used as a mental process in the first clause of example (4). In example (5), the citation is a clause simplex with only one process analyzed which is a material process. Thus, regardless of the type of the clause in each citation

whether it is a clause simplex or a clause complex, describing the experiential meanings focuses on the Transitivity System in each clause of the citation.

In the following discussions, the focus is on each type of the processes used in the clause/s of the citations of the literature review chapters of AL and IT theses.

#### 4.2.2.1.1 Material Processes

Material processes are processes of doing; they reflect that some entity did something, which in its turn, may be directed to another entity. The examples (6), (7), (8), (9), and (10) illustrate the use of material processes. Clauses with material processes involve two participants: the Actor and the Goal, as well as the circumstantial as an optional constituent that adds more information to the clause.

- (6) *Selim (2002) **conducted** an empirical study to investigate the students' acceptance of course website.* (P.20/IT/JO/S.2.3.2/Pr.1/L.1418-1419/Pg.100)
- (7) *In a similar way, Higuchi (2007, p.59) has **used** films as authentic spoken texts.* (P.6/AL/IR/S.2.8.2/Pr.2/L.54/Pg.47)
- (8) *In the study, the authors **integrate** GA with a gradient descent method to build hybridized techniques to select the optimal value for RBF and C parameters.* (P.8/IT/IR/S.2.2.1/Pr.20/L.595-597/Pg.42)
- (9) *Similarly, a study conducted by Taylor et al. (1987) **investigated** the relationship between ESL/EFL writing apprehension and highlighted form and content as well as the students' desire to enrol in advanced writing courses.* (P.3/AL/JO/S.2.3.5/Pr.6/L.662-664/P.51)
- (10) *Thus, Al-Khasawneh's (2010) study has **interviewed** Arab postgraduate students in College of Business only.* (P.3/AL/JO/S.2.5/Pr.2/L.1107-1108/Pg.71)

The citations in the examples (6), (7), (8), (9), and (10) include clauses with the following material processes: *conducted*, *used*, *integrate*, *investigated*, and *interviewed*”, respectively. The clauses with these material processes involve the logical subject constituent that is called the ‘Actor’, whereas the constituent at which the action is directed is called the ‘Goal’. ‘Selim’, ‘Higuchi’, ‘the authors’, ‘a study

conducted by Taylor et al. (1987)', and *Al-Khasawneh's (2010) study*'; in the examples (6), (7), (8), (9), and (10), respectively, are nominal constituents functioning as an *Actor* participant. On the other hand, *an empirical study*'; *films*', and *GA*', *the relationship between ESL/EFL writing apprehension*' and *Arab postgraduate students*' in the same examples, are nominal constituents that play the function of the *Goal* participant. The other constituent that is involved with clauses of the material processes is called the *Circumstance* that is realized through prepositional constituents. This is clarified in the examples (8), (9), and (10), whereby the constituents *In the study*' in example (8), *in advanced writing courses*' in example (9), and *in College of Business only*' in example (10) play the function of Circumstantial.

Material processes are used in clause simplexes as well as clause complexes. However, one of the limitations on using the materials processes is that they cannot project; material processes cannot be used in the projecting clauses, as examples (11) and (12) clarify.

- (11) *Previous researchers, like Li et al., used ADTCP as a base for their new enhanced scheme [94].* (P.7/IT/SY/S.2.3.1.3/Pr.6/L.669-670/Pg.50)
- (12) *Ok and Shon (2006) conducted a study to examine the acceptance of internet banking in Korea.* (P.13/IT/JO/S.2.11.5/Pr.2/L.793-794/Pg.67)

In example (11), the citation included only one clause, hence, it is called a clause simplex with the material process *used*'. In example (12), the citation is a clause complex that included two clauses. The first clause has the material process *conducted*' and the second clause consists of another material process *examine*'. Therefore, it is called an expansion *logico-semantic relationship*. The logico-

semantic relations are explained in more details in the second aspect of the ideational meanings i.e. in the logical meanings (Objective two: part two).

The Actor participant that is used in the clauses of the citations with the material processes used, and conducted in examples (12) and (13) is represented through different types of nominal constituents. For example, in some citations, the cited author takes the functional role of the Actor as in example (13) below.

- (13) **Ok and Shon** (2006) conducted a study to examine the acceptance of internet banking in Korea. (P.13/IT/JO/S.2.11.5/Pr.2/L.793-794/Pg.67)

In example (13), the citation has a clause with the material process conducted, whereby the cited authors Ok and Shon function as the Actor participant. In other citations with clauses including material processes, such as example (14) below, the cited author is represented as a part of a noun phrase or replaced by a general noun, such as the authors, in example (15) to function as the Actor participant.

- (14) As mentioned previously, **Faerch and Kasper's (1983) taxonomy** adopts a psychological approach of what is going on in the L2 speaker's mind. (P.19/AL/YE/S.2.5.4.3/Pr.3/L.419-420/Pg.24)

- (15) In the study, **the authors** integrate GA with a gradient descent method to build hybridized techniques to select the optimal value for RBF and C parameters. (P.8/IT/IR/S.2.2.1/Pr.20/L.595-597/Pg.42)

For the Goal, it is the second participant that is known as the direct object in traditional grammar. The Goal participant is represented through nominal groups, whereby the cited author forms a part of this nominal group in some citations as in example (16) below.

- (16) Varttala used **Salager-Meyer's taxonomic model** (i.e. five pre-established items.) (P.4/AL/YE/S.2.4.1/Pr.2/L.216-217/Pg.48)

In example (16), the citation is composed of one clause simplex including the material process *used*, whereby the cited author *Salager-Meyer* is a part of a nominal element that functions as the *Goal* participant. However, some material processes were used inappropriately; they were used in the projecting clause to realize *Projection* as a logico-semantic relation between two clauses in a clause complex. Projecting clauses are limited only to two processes which are *verbal* and *mental* as discussed in the findings of part two of objective two. The examples (17) and (18) clarify how the material processes are used inappropriately in the projecting clauses.

(17) *Licklider and Vezza (1978) wrote that it soon became obvious that the ARPANET (the Internet today) was becoming a human-communication medium with very important advantages over normal U.S. mail and over telephone calls. (P.2/AL/JO/S.2.4/Pr.3/L.1065-1068/Pg.66)*

(18) *Furthermore, Pearson, Bahmanziari, Crosby & Conrad (2003) has empirically documented that culture has less influence on CSE. (P.20/IT/JO/S.2.2.1/Pr.46/L.907-908/Pg.71)*

In example (17), the citation includes a clause with the material process *wrote* that is used inappropriately in *Projection*. In this clause, the material process *wrote* is used in the projecting *primary* clause, and is followed by another secondary clause that is called the projected clause. Similarly, in example (18), the citation has a clause complex with two clauses: the projecting clause and the projected one. In the projecting clause, the material process *documented* is used inappropriately. Material processes like *wrote* and *documented* are not used in *Projection*; rather, they are used in *Expansion*. The logico-semantic relations represented by *Projection* and *Expansion* are elaborated more in part two of objective two. Based on the findings, the material processes were used dominantly in the literature review chapter

of AL and IT theses by EFL Arab postgraduates. Table 4.9 demonstrates the number and the percentage of using the material processes.

Table 4.9

*Material Processes in the Literature Review of IT and AL Theses*

Discipline		Frequency for each thesis										Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11		
F	126	317	635	518	566	581	366	314	468	334		4225
%												55.40
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15		
F	821	197	226	359	242	216	649	316	191	181		3398
%												44.60

Though AL and IT belong to two different fields, representing the soft domain and the hard domain of knowledge, respectively, ‘material’ processes dominated the literature review chapter of both groups of PhD theses. This implies that the discipline ‘field’ is a register variable that has an effect on student’s high use of material processes in IT. On the other hand, discipline does not have an effect on students’ use of material processes in AL. In other words, other factors such as students’ educational background or other unknown factors may be the reason for students’ high use of material processes in the literature review chapter of AL theses. In addition, EFL Arab postgraduates in both AL and IT theses followed a similar pattern of using the material processes. They use a high number of material processes in the area related to the background of the study, theories, definitions, and concepts. Then, this is followed by a higher number of material processes in the area related to previous studies. Finally, the number of material processes decrease in the section related to the theoretical/conceptual framework. Figure 4.8 demonstrates the pattern of using the material processes in the literature review chapter of AL and IT theses.

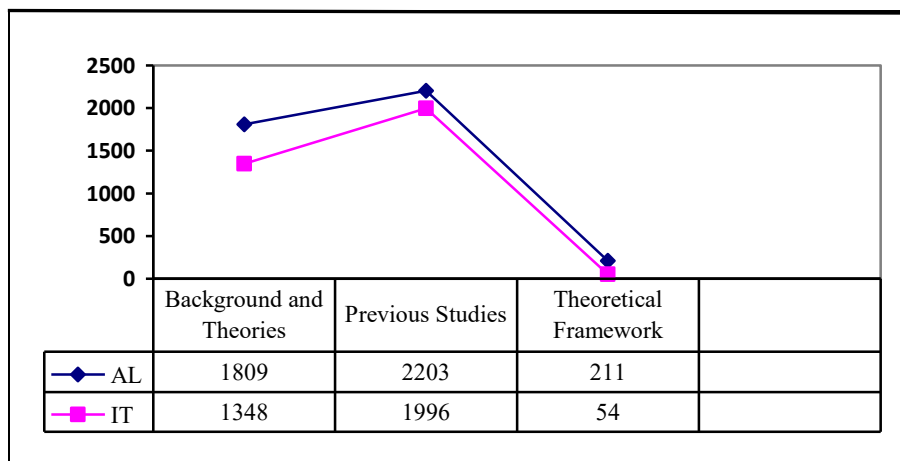


Figure 4.8. Pattern of using material processes in AL and IT

The similarity in using the *material* processes in the literature review chapter of disciplines that belong to two different domains possibly reflect the tendency of EFL Arab postgraduates to present more credibility to their studies by discussing real-world research activities. It could also reveal their attempts to justify conducting their studies by reporting the several studies that are interested in the topic under investigation. The strategies EFL Arab postgraduates follow in summarizing the articles when writing the literature review chapter might be another reason for this similarity. For example, a student may start with the name/s of the author/s who conducted a study, analysed documents, and adopted a certain method. Hence, the material process will be used mostly.

In summary, *material* processes are the dominant type of processes that were used in the literature review chapter of Applied Linguistics and Information Technology. This type of processes involved two participants; one participant plays the role of the *Actor* and does the action, whereas the other participant plays the role of the *Goal* and receives the action. Other constituents that were involved in clauses with *material* processes are Circumstantial. Both the *Actor* and the *Goal* constituents

are realized by nominal groups, whereby the cited author can function these two functional roles. As for the Circumstantial, it is realized through adverbial or prepositional constituents. It is worth mentioning that material processes cannot be used in Projection.

In the following discussion, a demonstration of another type of processes that is called the mental process is presented.

#### 4.2.2.1.2 Mental Processes

Mental processes are used in clauses to express realizations of thinking, feelings and perceiving. Thus, these mental processes are subcategorized into other three subcategories: (A) Cognition, (B) Affection, and (C) Perception. These processes were used in clause simplexes as well as clause complexes. In the clause complex, the mental processes were used mainly in the primary projecting clause, followed by a projected clause. Examples (1) and (2) below demonstrate the use of the mental processes in the clause simplex as well as the clause complex.

- (1) *For example, in [22] the authors **consider** NoA only in the current time interval.* (P.15/IT/PA/S.2.4.5/Pr.5/L.270/Pg.26)
- (2) *Shapiro (1981), on the other hand, **believes** that „the study of PD should be in terms of general concepts such as power, conflict, control, or domination““ (p.243).* (P.12/AL/IR/S.2.15/Pr.1/L.1127-1128/Pg.73)

In example (1), the citation consists of only one clause that is a clause simplex with the mental process consider. On the other hand, in example (2), the citation includes two clauses. Hence, it is called a clause complex with *Projection* Quoting that realizes the logico-semantic relationships between the two clauses. In projection, two clauses are involved; the projecting clause includes the mental

process believes’, whereas the projected clause has any type of processes taking the form of either Reporting’ or Quoting’. Projection is discussed in the findings of part two in objective two.

Clauses with mental’ processes may involve two nominal participants; one participant is the SENDER’ who thinks, feels, and perceives, whereas the other participant is the phenomenon. For example, the constituent the authors’ in example (1) above is the SENDER’ participant, whereas the constituent NoA’ is the other participant that functions as the phenomenon. Similar to the clauses with material’ processes, prepositional and/or adverbial constituents functioning as Circumstantial are involved in clauses with mental’ processes. For example, the prepositional constituent in [22]’ in example (1) above functions as Circumstantial to refer to place location’. Though it is apparently a non-integral citation, the cited author is integrated with the structure of the clause that is implied in using the reference number [22]. This numbering system of citation together with the preposition in’ stands for a prepositional constituent that functions as Circumstantial: Location Place’. For the name of cited author, it takes the functional role of the SENDER’ with clauses of mental’ processes as in examples (3) and (4).

(3) **Shapiro** (1981), on the other hand, believes that „the study of PD should be in terms of general concepts such as power, conflict, control, or domination” (p.243). (P.12/AL/IR/S.2.15/Pr.1/L.1127-1128/Pg.73)

(4) **Mehlinger** (1995, p. 3) feels that there is no need to be careful and thoughtful in editing the materials. (P.6/AL/IR/S.2.9.1/Pr.5/L.919-920/Pg.68)

In example (3), the citation is a clause complex that involves the name of the cited author Shapiro’. This cited author is a nominal constituent that is functioning as the SENDER’ since the clause includes the mental process believes’. Similarly, the

name of the cited author *‘Mehlinger’* in example (4) functions as the *‘\_SENSEr’* as the clause contains the mental process *‘feel’*. In other examples, the cited author is replaced by a pronoun to function as the *‘\_SENSEr’*, as in example (5).

(5) *Second, he believes that politics can be „pleasurable” (p.15).*  
(P.12/AL/IR/S.2.3/Pr.3/L.120-121/P.28)

In example (5), the cited author is replaced by the pronoun *‘he’* to function as the *‘\_SENSEr’* of the clause with the mental process *‘believes’*. The other participant that is involved with the clauses of mental processes is called the *‘\_Phenomenon’*. In such a usage, the constituent is a nominal group which can be represented by an abstract noun. In some examples, the *‘\_Phenomenon’* involved the cited author that is represented by the possessive adjective *‘her’* as a part of a nominal group, as demonstrated in example (6) below.

(6) *Her taxonomy is still considered the most significant in OCSs area as most of the successive taxonomies were proposed based on her taxonomy.* (P.19/AL/YE/S.2.5.1/Pr.3/L.222-223/Pg.12)

Table 4.10 demonstrates the number of the mental processes used in the literature review chapters of AL and IT of PhD theses by EFL PhD Arab postgraduates.

Table 4.10

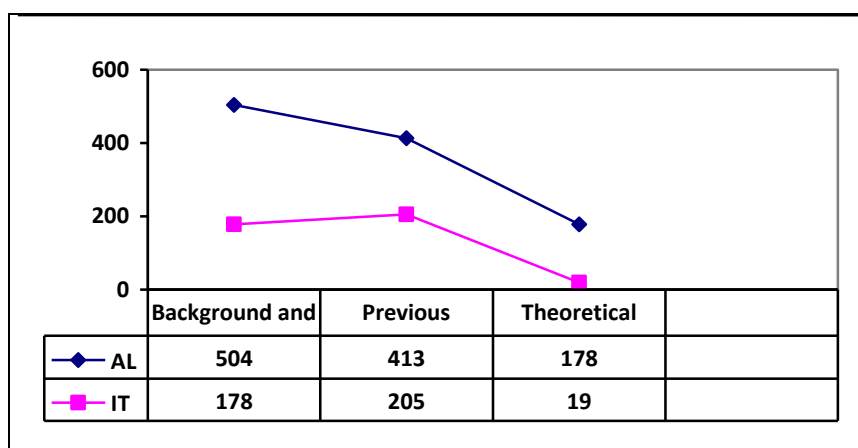
*Mental Processes in the Literature Review of AL and IT Theses*

Frequency for each thesis											Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11	
F	43	56	200	134	94	91	67	109	96	85	975
%											70.80
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15	
F	45	12	26	54	34	54	91	43	12	31	402
%											29.20

Though mental processes were used differently in the literature review chapter of AL and IT theses in terms of the number of frequencies, they have the fourth rank in the number of occurrence in the literature review chapter of AL and IT theses. Using

mental processes in AL as a soft domain with a high percentage and in IT with a low percentage reflects the effect of the domain to which the discipline belongs. This highlights the effect of the field as a register variable that influences students' use of processes in academic writing. Such a use implies that EFL Arab postgraduates are aware of using the mental processes. Reading good sources and the attempt of EFL Arab postgraduates to mimic the style of writing of the articles they read can possibly justify their actual use of the 'mental' processes.

Figure 4.9 demonstrates how the mental processes in the literature review chapter of AL theses are used with a high percentage in the sections related to theories, background, and definitions. Then, they decrease in the sections related to previous studies sections. Finally, they decrease in the section related to the theoretical/conceptual framework. This shows that the type of the information presented in each section also affects the use of the processes. In other words, in each genre, there are other subgenres that can influence the use of language.



*Figure 4.9. Pattern of using mental processes in AL and IT*

On the other hand, in IT, 178 mental processes are used in the sections related to theories, background and definitions. Then, they increase to 205 mental processes. Finally, they decrease to reach 19 mental processes in the section of the theoretical/conceptual framework. The number of occurrence of the mental processes in the literature review chapter of IT was lower than the Applied Linguistics due to disciplinary influences.

In summary, mental processes are among the other types of processes which were used in the literature review chapter of AL and IT by EFL Arab postgraduates. Mental Processes such as *believe*, *think*, *interpret*, and *see* were used in clause simplexes as well as clause complexes. When used in the primary clause, the mental process is used in Projection to either report or quote. Mental processes involve an obligatory constituent that is a human participant and is called ‘SENSE’. Another optional participant may be involved with the clauses of the mental processes is called the ‘Phenomenon’. The cited author has the functional role of a ‘SENSE’ or ‘Phenomenon’ when used with clauses of the mental processes. Similar to the material processes, clauses with mental processes can involve an optional constituent called the ‘Circumstantial’.

#### **4.2.2.1.3 Verbal Processes**

Verbal processes are processes of saying and arguing. These processes are used in clause simplexes as well as clause complexes. In the clause complex, verbal processes are used mainly in the projecting ‘primary’ clause to function as a projecting clause. Verbal processes occupied the third rank in terms of the number of

usage in the literature review chapter of AL and IT. Examples (1), (2), and (3) demonstrate using the verbal processes in the clauses of the citations.

- (1) *Xia and King (2002) **conclude** that alignment has been reported as an organisation wide issue that directly influences the company's overall performance. (P.17/IT/JO/S.2.6.1/Pr.4/L.588-589/Pg.52)*
- (2) *Tennen (1983) **indicates** that overlap is unintentional in which it occurs naturally in simultaneous speech. (P.12/AL/IR/S.2.14/Pr.5/L.1059-1062/Pg.70)*
- (3) *Al-Wer (2005, p.631) **stated** that gender is the most sophisticated social variable in sociolinguistic studies. (P.1/AL/IR/S.2.7.1/Pr.8/L.528-530/Pg.55)*

In examples (1), (2) and (3), the citations involve clause complexes. For example, in citation (1), the primary clause has the verbal process *conclude* to function as a projecting clause. Similarly, in example (2), the citation is a clause complex that involves the verbal process *indicates* in the projecting clause. In example (3), the citation also consists of a clause complex with a primary clause involving the verbal process *stated* to function as a projecting clause. When verbal processes are used in the clauses, they involve two participants which function as a *SAYER* and a *VERBIAGE*. The *SAYER* participant for clauses of the verbal processes are realized through nominal elements, such as *studies*, *results*, *findings*, as in examples (4) and (5).

- (4) *His study also **revealed** that both L1 and L2 writers had commonalities in their writing concerns (Raimes, 1985). (P.3/AL/JO/S.2.3.5/Pr.3/L.635-637/Pg.50)*
- (5) *Salager-Meyer's findings **indicate** that the Discussion section in RPs and CRs were heavily hedged while the Method section was the least hedged section. (P.4.AL/YE/S.2.4.1/Pr.1/L.198-199/Pg.47)*

In examples (4) and (5), the verbal processes *revealed* and *indicate* are used in the primary clauses, and the *SAYER* was represented by nominal constituents. For example, in citation (4), the nominal constituent *His study* functions as a *SAYER* which is represented by the possessive adjective *His* to refer to the cited author. In example (5), the *SAYER* is represented by the nominal constituent *Salager-Meyer's findings*.

*Meyer*''sfindings'', whereby the cited author *Salager-Meyer* is a part of this nominal constituent. In other examples, as in example (6) below, the cited author is used as the *SAYER* for clauses of the verbal processes.

- (6) *Xia and King (2002) conclude that alignment has been reported as an organisation wide issue that directly influences the company''s overall performance. (P.17/IT/JO/S.2.6.1/Pr.4/L.588-589/Pg.52)*

In example (6), the cited author *Xia and King* is used as the *SAYER* of the clause that includes the verbal process *conclude*. The cited author in some examples is replaced by a pronoun to function as the *SAYER*, as in example (7).

- (7) *He mentions that these two religious rituals are practiced in the two cultures differently. (P.11/AL/LI/S.2.4.1.2/Pr.1/L.898-899/Pg.53)*

In part two of Objective Two discussed later, verbal processes are used in projection to report, suggest, and quote. This feature of the verbal process may result in reclassifying verbal processes into other subcategories based on their implied meaning. For example, some processes can be classified as **finding** processes, such as *show*, *demonstrate*, and *find*. Other processes can be classified as **stating** processes, including *state*, *confirm*, *said*, and *mentioned*. The other category may include processes of **arguing** and **suggestions**, such as *suggest*, *propose*, *hypothesize* and *recommend*.

Similar to the clauses with material and mental processes, clauses with verbal process also involve the *Circumstantial* that is realized by a prepositional constituent. An example of the Circumstantial constituent is clarified in example (8).

- (8) *He mentions that these two religious rituals are practiced in the two cultures differently. (P.11/AL/LI/S.2.4.1.2/Pr.1/L.898-899/Pg.53)*

In example (8), the citation is composed of a clause complex with the projecting clause including the verbal process *mentions*. The *Circumstantial* is represented by the prepositional constituent *in the two cultures* to refer to Location (place). In Table 4.11, there is a demonstration of the number and percentage of using verbal processes in the literature review chapter of AL and IT theses by EFL Arab postgraduates.

Table 4.11

*Verbal Processes in the Literature Review of AL and IT Theses*

Discipline	Frequency for each thesis										Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11	
F	97	149	289	231	249	439	132	70	193	237	2086
%											72.40
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15	
F	129	36	50	71	76	108	194	30	64	38	796
%											27.60

Similar to mental processes, using verbal processes in AL and IT was influenced by the discipline (field). AL as a soft domain that is based on arguments included verbal processes with a higher percentage, whereas IT as a hard domain included verbal processes with a lower percentage.

In spite of the differences between the literature review chapter of AL and IT in the number and percentage of the verbal processes, they share a similar pattern, represented by a high use of the verbal processes in the sections related to theories, definitions and background. This is followed by an increasing number in the section of previous related studies. Then, in the two groups of theses, verbal processes decrease, as demonstrated in Figure 4.10. What is evident in Figure 4.10 is the high usage of the verbal processes in the sections related to the theories and background

and the sections of the related studies. This shows the dependence of the Applied Linguistics as a soft domain on the strength of the arguments through using verbal processes.

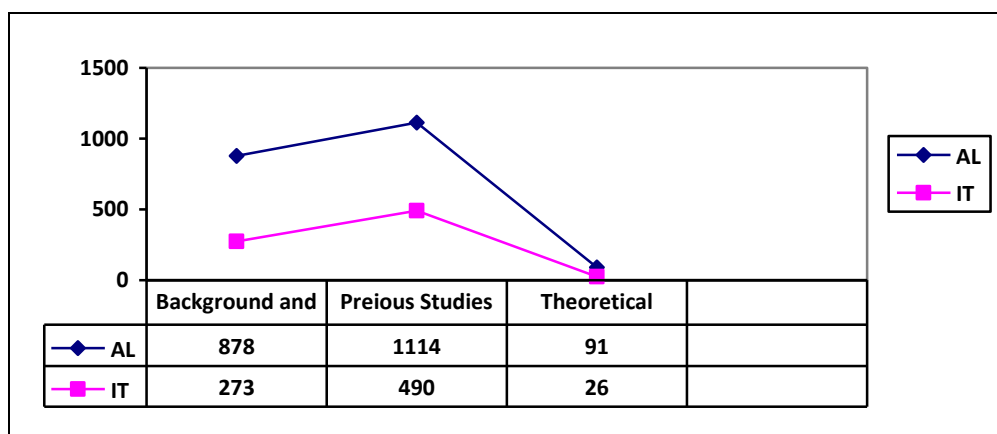


Figure 4.10. Pattern of using verbal processes in AL and IT

On the other hand, the lower use of the verbal process in the literature review chapter of Information Technology theses compared with the Applied Linguistics is due to the disciplinary influences. In other words, IT as a hard domain depends on facts rather than arguments; therefore, a lower use of verbal processes is employed.

In summary, verbal processes were used to realize the Transitivity System in the literature review chapter of AL and IT theses. Verbal processes involved an obligatory participant that is the *‘\_SAYER’*. The *‘\_SAYER’* was expressed through nominal groups, whereby the cited author formed a part of this nominal constituent. The other participant that is involved with the verbal processes is the *‘\_Verbiage’* that is realized through the nominal groups or the cited author as a part of a nominal group.

In the following section, there is an explanation of another process type that was used in the literature review chapter of AL and IT theses by EFL PhD Arab postgraduates.

#### 4.2.2.1.4 Behavioural Processes

Behavioural processes are processes of physiological and psychological behavior which intermediate between material and mental processes, as in examples (1), (2), and (3).

- (1) *In examining the discourse of higher education, Fairclough (1993) **noticed** interdiscursivity or mix not only on the discourse level, but also on the genre and style levels. (P.2/AL/JO/S.2.3.2/Pr.3/L.770-772/Pg.52)*
- (2) *He **noticed** the discrepancy in the supervisor's and student's understanding of writing goals and audience expectations. (P.3/AL/JO/S.2.3.6/Pr.8/L.862-864/Pg.60)*
- (3) *In another study, James (1984) **observed** the impact of difficulties on a more comprehensive communicative success. (P.3/AL/JO/S.2.3.6/Pr.5/L.828-829/Pg.58)*

In example (1), the citation involves the clause with the behavioural process *noticed*, in which the cited author *Fairclough* functions as the *BEHAVER*. Similarly, in example (2), another behavioural process *noticed* is used and involves the participant *he* that refers to the cited author as the *BEHAVER*. Example (3) also comprises the clause with the behavioural process *observed*. In this clause, the cited author *James* functions as the *BEHAVER*.

These types of processes are used in clause simplexes as well as clause complexes. However, behavioural processes are not used in the Projection logico-semantic relationships except when they are used in the projected clause. The obligatory participant that takes the functional role of the *BEHAVER* can be either the cited author, a pronoun referring to the cited author, a noun involving the cited author as a part of it or abstract nouns, such as *studies*, *results*, *findings*. Similar to the

material, mental, and verbal processes, behavioural processes also involve the ‘Circumstantial’ that is realized by prepositional constituents, as in example (4).

- (4) ***In another study**, James (1984) observed the impact of difficulties on a more comprehensive communicative success. (P.3/AL/JO/S.2.3.6/Pr.5/L.828-829/Pg.58)*

In example (4), the citation is a clause simplex that includes the prepositional constituent *In another study..*“ which functions as ‘Circumstantial’ that refers to Location (place). In Table 4.12, there is a demonstration of the behavioural processes in the literature review chapter of AL and IT theses by EFL PhD Arab postgraduates.

Table 4.12

*Behavioral Processes in the Literature Review of AL and IT Theses*

Discipline	Frequency for each thesis										Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11	
F	6	3	3	19	15	8	11	—	1	1	67
%											76.14
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15	
F	—	1	3	2	4	1	5	1	3	1	21
%											23.86

The literature review of AL and IT share similar characteristics represented by the low number of using behavioural processes. This can be attributed to the tendency of EFL Arab postgraduates to use processes denoting real-world activities or referring to statements or beliefs rather than behavioural ones. Only 67 behavioural processes are used in AL theses and 21 behavioural processes were used in IT ones. This signifies that the literature review of AL has a higher number of frequencies. In summary, behavioral processes were another type of processes that were used by EFL Arab postgraduates in the literature review chapters of Applied Linguistics and Information Technology theses.

#### 4.2.2.1.5 Relational Processes

The following discussion includes an explanation of another type of processes with four subcategories: intensive processes, possessive processes, circumstantial processes, and causative processes.

Intensive processes refer to being processes which imply that something is. They are of two subtypes: (A) Attributive and (B) Identifying. In attributive intensive processes, a relationship is established between two terms using either the process be or one of its synonyms. In this subtype of the relational processes, an attribute, a quality or a description is attributed to the participant that is functioning as the Carrier. The Carrier participant is realized through a noun or a nominal group, and the Attribute is also realized through a definite or indefinite nominal group, as in examples (1) and (2).

- (1) *It is Chomsky's (1965, p.3) idealized way in approaching language that aims to specify the universal principles which characterize the innate structure of language.*  
(P.1/AL/IR/S.2.3.1/Pr.2/L.62/64/Pg.33)
- (2) *Halliday's (1985) approach is functional grammar as opposed to „formal grammar“ and functional as it intends to interpret the text, the system and the linguistic structures.*  
(P.2/AL/JO/S.2.2.1/Pr.1/L.176-178/Pg.26)

Both examples (1) and (2) are citations which include several clauses in each. The first clause in example (1) includes the attributive intensive process is. The pronoun It functions as the Carrier, whereas the nominal group Chomsky's (1965, p.3) idealized way functions as the Attribute. This type of processes is is irreversible; therefore, it cannot be formed in the passive. In this clause of the citation, the cited author is a part of a nominal group constituent that functions as an Attribute. In addition, in example (2), the citation involves the clause with the attributive intensive process is, in which the name of the cited author is a part of a nominal group

constituent that functions as the Carrier. The Attribute in example (2) is also realized through the nominal group functional grammar that is an abstract noun. The Attribute can be also an adjective, which is a quality ascribed to the Carrier, as in example (3).

- (3) *His approach is systemic as the structures that people tend to use in certain recurrent situations are systematic.*  
(P.2/AL/JO/S.2.2.1/Pr.1/L.178-179/Pg.26)

In example (3), the first clause has the attributive intensive process is. In this clause, a possessive adjective referring to the cited author is used as a part of the nominal constituent His approach that functions as the Carrier, whereas systemic is an adjective constituent that functions as the Attribute.

Relational intensive processes can be in the passive form when used as identifying intensive processes. Identifying intensive processes contrast with the attributive intensive processes semantically and grammatically. The semantic difference implies that the clause with an identifying intensive process is to define, whereas the clause with an attributive intensive process is to classify or describe. The examples (4), (5), (6), and (7) clarify how the identifying intensive process is used.

- (4) *Elbow (1973) is one of the most famous researchers who follow this method.* (P3/AL/JO/S.2.2.2/Pr.1/L.137-138/Pg.26)  
 (5) *This is the next most general causes of writing anxiety (Boice, 1993).* (P.3/AL/JO/S.2.5/Pr.16/L.1245-1246/Pg.78)  
 (6) *Dewey (1933) and Schon (1983, 1987) are two of the most cited contributors to foundational concepts of reflective practice (York-Barr et al., 2006).* (P.5/AL/YE/S.2.2/Pr.3/L.29-30/Pg.32)  
 (7) *The authors observed that the TCP's window mechanism is one of the main factors for throughput degradation.* (P.7/IT/SY/S.2.3.2.1/Pr.12/L.879-880/Pg.61)

In example (4), the citation includes the clause with the identifying intensive process is. This clause is reversible; therefore, the process is is an identifying process. The

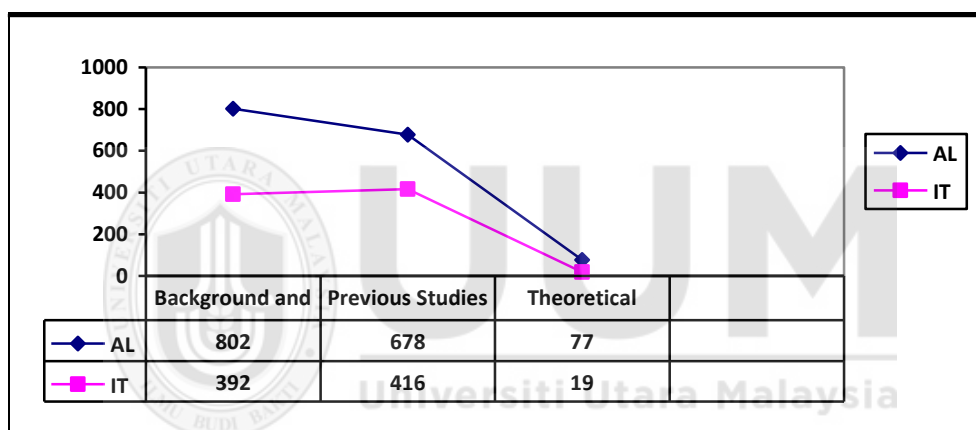
cited author *‘Elbow’* is a nominal constituent that functions as *‘Token’*, whereas *‘one of the most famous researchers who follow this method’* is a nominal constituent that functions as *‘Value’*. Both *‘Token’* and *‘Value’* are realized through definite nominal elements. In example (5), the identifying intensive process *‘is’* is used. The demonstrative *‘This’* that is referring to a previous item in the text functions as the *‘Token’*, whereas the nominal element *‘the next most general causes of writing anxiety’* functions as the *‘Value’*. All clauses with identifying processes include two nominal constituents, which can form the passive. Table 4.13 describes the number and percentage of using the intensive processes in the literature review of AL and IT theses.

Table 4.13

<i>Intensive Processes in the Literature Review of AL and IT Theses</i>										
Discipline	Frequency for each thesis									
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11
F	91	71	296	227	138	200	121	83	125	205
%										
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15
F	75	86	74	95	80	73	150	86	54	54
%										

Relational intensive processes have the second rank in terms of number of usage in the literature review chapter of IT. On the other hand, in AL, relational intensive processes occupy the third rank in the number of occurrences following the verbal processes. Discussing facts may entail using relational intensive processes; therefore, these were used with a higher frequency in the literature review chapter of IT, following the material ones. On the other hand, Applied Linguistics is a soft domain that is based on discussions and arguments. As a result, relational intensive processes followed the verbal processes in terms of the number of occurrence.

The two fields, AL and IT, are different in the patterns of using the relational intensive processes. For example, AL starts with a high number in the sections related to theories, concepts and background. Then, the number decreases in the related studies sections till it reaches 77 processes. On the other hand, relational intensive processes in IT start with 392 processes in the theories, concepts and background sections. Then the number increases in the sections related to studies, till it reaches 19 processes, as clarified in Figure 4.11.



*Figure 4.11.* Pattern of using intensive processes in AL and IT

One of the most distinguished characteristics of using processes is using relational intensive processes in IT with a percentage following the material processes. This can be attributed to the tendency of students in the hard domains such as IT to use relational intensive processes to reveal facts rather than arguing about them. On the other hand, students in the soft domains like AL tend to use verbal processes in order to argue, state, and claim. Consequently, verbal processes were used more than relational intensive ones.

In summary, relational intensive processes can be either attributive or identifying. On the one hand, clauses with attributive intensive processes are realized by two nominal groups or a nominal group and an adjective constituent. The two nominal groups and the adjective group function as *Carrier* and *Attribute*. These nominal groups can be either nominal constituents, such as the cited author, abstract nouns, pronouns or a demonstrative. Similarly, the *Attribute* constituent is realized by a nominal constituent such as the cited author or other nominal groups. In other examples, it is realized through an adjective constituent. Clauses with attributive intensive processes are irreversible; therefore, passive cannot be formed. On the other hand, clauses with identifying intensive processes are reversible and are realized by definite nominal groups which function as *Token* and *Value*.

The following discussion involves an explanation of the second category of the relational processes.

These types of processes imply meaning about the circumstantial dimension, such as location, manner, and cause. In such clauses, circumstances can be expressed through either circumstantial constituents that are used with the different types of processes, including material, mental, behavioural, verbal or relational. In using the intensive attributive process, that is the attributive circumstantial, the circumstance is often expressed in the Attribute which is a prepositional constituent referring to location, as in examples (1) and (2).

- (1) *One of the main weaknesses of Wishnoff's study is **in the data of his study** as Wishnoff compared hedging devices **in the written communication** (i.e. academic written paper) with those in the chat room-like discussion (i.e. computer-mediated communication).* (P.4/AL/YE/S.2.4.3/Pr.11/L.421-423/Pg.58)

- (2) *Along the same lines, Henry and Roseberry (1997) state that the most common place for the genre of persuasive essay is **in the higher educational setting**. (P.4/AL/YE/S.2.7/Pr.1/L.701-703/Pg.71)*

Example (1) involves the intensive attributive processes *is*, in which the *Circumstantial* is realized through the prepositional constituent „*in the data of his study*“. The *Circumstantial* can be used with other types of processes as in example (1), whereby the material process *compared* is used, and the *Circumstantial* is expressed through the prepositional constituent *in the written communication*. Similarly, the *Circumstantial* in example (2) is used with the attributive intensive process *is* and is expressed through the prepositional constituent *in the higher educational setting*. However, *Circumstantial* processes were the least type of processes used by EFL Arab postgraduates in the citations of the literature review of AL and IT PhD theses due to using *Circumstantial* as prepositional constituents to refer to time or place rather than using processes. Example (3) clarifies how the circumstantial process *dates back* is used to refer to time.

- (3) *The association between femininity and standard language **dates back** to the Victorian era where “speaking properly” became linked to being a lady (Romaine, 1999). (P.10/AL/JO/S.2.3.1.3/Pr.9/L.570-572/Pg.52).*

The number of frequency of *Circumstantial* processes is demonstrated in Table 4.14 below.

Table 4.14

<i>Circumstantial Processes in the Literature Review of AL and IT Theses</i>										
Discipline		Frequency for each thesis								
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11
	F	---	3	4	9	1	3	2	1	2
										27
										69.23
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15
	F	3	---	1	2	---	---	3	1	---
										2
										12
										30.77

The literature review chapter of AL has a higher number of circumstantial processes compared with IT. Nevertheless, expressing ‘Circumstantial’ processes was rarely used in the citations of the literature review chapter of AL and IT theses. This may reveal the dependence of EFL Arab postgraduates to use prepositional constituents rather than processes to express time, location, cause, and manner. This may also reflect their lack of vocabulary that expresses ‘Circumstantial’ processes.

In the following discussion, another explanation of the third subcategory of the relational processes is presented.

Possessive processes imply meanings about ownership and possessions between participants of the clause. Hence, it is possible to encode possession through attributive possessive processes, such as *to have*, *had*, *belong*, and *have got*, as in examples (1), (2), and (3).

- (1) *In another study, Swangboonsatic (2006) found that emails **belong** to a single genre. (P.2/AL/JO/S.2.4.3/Pr.2/L.1319/P.77)*
- (2) *Al-Samawi's study, however, (1995) **has** some weaknesses. (P.19/AL/YE/S.2.8.2/Pr.8/L.868-870/Pg.51)*
- (3) *Romaine (1994) for instance **has** one such definition where a speech community is defined as a group of people not necessarily sharing the same language yet sharing a set of rules and norms for the use of language. (P.1/AL/IR/S.2.4/Pr.1/L.278-280/Pg.43)*

In examples (1), (2), and (3), the citations include clauses with relational processes that signal ownership, represented mainly by the relational possessive processes ‘*belong*’ in example (1) and ‘*has*’ in examples (2) and (3). The possessor in these clauses is realized through nominal elements; in some of which the name of the cited author takes the role of the Possessor. Table 4.15 demonstrates the number and percentage of using the relational possessive processes.

Table 4.15

*Possessive Processes in the Literature Review of AL and IT Theses*

Discipline		Frequency for each thesis									Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11	
F	10	32	135	59	81	42	30	21	49	58	517
%											66.37
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15	
F	38	19	25	37	31	24	51	18	12	7	262
%											33.63

Using the relational possessive processes in AL and IT theses is different; the number of possessive processes in AL was higher. This might be attributed to the high density of citations in AL. The two fields represented by AL and IT are also different in terms of using the patterns of possessive processes, as illustrated in Figure 4.12.

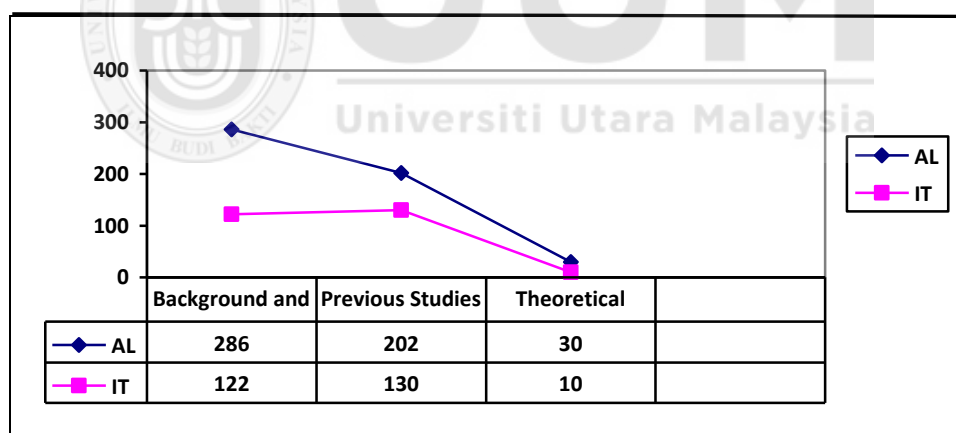


Figure 4.12. Pattern of using possessive processes in AL and IT

In the literature review chapters of AL, a high number in the theory and background sections is used. Then, the number decreases in the related studies sections, till reaching the sections related to the theoretical/conceptual framework. On the other

hand, in IT theses, the highest percentage of relational possessive processes is in the related studies sections.

Possessive processes illustrate another characteristic that distinguishes between theses that belong to two different fields. That is to say, field is a register variable that affects the use of possessive processes in the literature review chapters of AL and IT theses.

Causative processes are another subtype of relational processes used in the literature review chapter of AL and IT theses by EFL PhD Arab postgraduates. These causative processes involve a nominal constituent that functions as the *Agent*. Clauses with causative processes involve another clause with either an explicit or an ellipsed process, particularly with attributive intensive processes. In such a case, the *Agent* has another function called *Attributor*. Examples (1), (2), (3), and (4) are citations with clauses that include causative processes.

- (1) *This general reversal of thought from the Western gender pattern **made** Ibrahim (1986, p. 116) to conclude: Unlike women in the rest of the world, Arabic-speaking females tend to approximate Standard Arabic to a lesser degree than Arabic-speaking males. This conclusion is problematic because it is predicted on the false assumption that standard and prestigious Arabic are one and the same variety. (P.1/AL/IR/S.2.7.1/Pr.6/L.513/Pg.54)*
- (2) *Eckert (1989) assumed that the fact that women appear to be universally granted less power than men will certainly not **cause** all women and men to act alike, given all the other factors that are involved. (P.1/AL/IR/S.2.7.1/Pr.3/L.482-/Pg.52)*
- (3) *However, they had not **made** it clear as to how far does the slower congestion window growth may adversely effect short connections with only relatively small amounts of data. (P.7/IT/SY/S.2.3.2.1/Pr.13/L.889-891/P.61-62)*
- (4) *This **causes** Littlewood (1992) to affirm that language and communication are very closely related but they are not the same phenomenon. (P.19/AL/YE/S.2.2/Pr.2/L.29-31/Pg.2)*

In example (1), the citation includes several clauses; the first clause has the causative process *made*, whereas the second clause involves the process *conclude*. The nominal group *This general reversal of thought from the Western gender pattern* functions as an *Agent* participant, whereas the cited author *Ibrahim* is a nominal constituent that functions as the *Sayer*. In example (2), the citation also includes several clauses; one of the clauses includes the causative process *cause*, and is followed by another clause with the material process *act*. In example (3), one of the clauses involves the causative process *made*. The *Agent: Attributor* constituent is realized by the pronoun *they*. This clause is followed by another clause with an ellipsed process, in which the pronoun *it* stands for the *Carrier* function, whereas the *Attribute* is realized through the adjective *clear*. Similarly, the causative process *cause* is used in example (4). Table 4.16 demonstrates the number of the causative processes used in the literature review of PhD theses by EFL PhD Arab postgraduates in AL and IT.

Table 4.16

*Causative Processes in the Literature Review of AL and IT Theses*

Discipline		Frequency for each thesis									Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11	
F	4	22	10	21	8	14	4	23	10	4	120
%											71.85
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15	
F	5	—	1	15	4	7	7	6	—	2	47
%											28.15

The literature review of AL has a higher number of causative processes compared with IT. In general, causative processes were used with a low percentage in the literature review chapters of AL and IT theses. This may reveal that EFL Arab postgraduates are affected by the sources from which they cite the information, and

such sources involve only few examples of the causative processes. Another possible reason is using the processes that are more common to them and are used by other authors in the literature review of the published sources. A third reason is the tendency of the EFL Arab postgraduates to use processes that refer to statements, suggestions, conducting studies and analysis that attract the attention of the readers and the examiners to something significant or really happened.

In summary, the relational processes involved two types of processes. Clauses with attributive processes are not reversible; the passive cannot be made. On the other hand, clauses with identifying processes are reversible; passive can be made. Carrier and Attribute were the two participants that are realized through nominal groups and used with attributive processes, whereas Token and Value participants were used with the identifying ones. These participants are realized through abstract nouns, cited authors' names or pronouns that refer to either the abstract nouns or the cited authors' names. Relational processes also included possessive and causative processes. The differences in the number of frequencies and percentage between AL and IT show that field is a register variable that affects the use of the Transitivity System in clauses of the citations.

In the following discussion, existential processes are presented as another type of processes that were used in the literature review chapters of AL and IT theses.

#### **4.2.2.1.6 Existential Processes**

These types of processes represent the existence of something or that something happens. With clauses that include existential processes, *there* must be used, but it

does not have representational functions; *there* is used because the clause needs a subject. Clauses with *there* include existential processes, such as *be*, *exist*, and *arise*, and these existential processes are followed by nominal groups functioning as Existent, as in examples (1) and (2).

- (1) *According to al-., Ubayd (2002), **there are** three different methods for translating the Holy Quran: literal, lexical and interpretive translation.* (P.11/AL/LI/S.2.3/Pr.11/L.809-810/Pg.49)
- (2) ***There has been** a great emphasis on the importance of teaching and instructional performance of college teachers (Wlodarsky & Walters, 2006) and on the improvement of higher education teaching quality (Levine, 2005).* (P.5/AL/YE/S.2.4.2/Pr.1/L.425-427/Pg.50)

In example (1), the citation includes the clause with *there* as the subject, followed by the existential process *are*. The nominal group *three different methods* is a nominal constituent that functions as the *Existent*. Similarly, in example (2), the clause of the citation involves using *There* with the existential process *been*. This existential process is followed by the Existent *a great emphasis* which is realized by a nominal constituent. Similar to other processes, such as verbal, mental, material, behavioural and relational, clauses with existential processes involve *Circumstantial*. Table 4.17 clarifies the number and percentage of using the existential processes in the literature review chapter of AL and IT by EFL PhD Arab postgraduates.

Table 4.17

*Existential Processes in the Literature Review of AL and IT Theses*

Discipline		Frequency for each thesis									Total
AL	P.1	P.6	P.12	P.2	P.3	P.10	P.4	P.5	P.19	P.11	
F	8	7	21	5	9	14	8	7	4	14	97
%											58.80
IT	P.8	P.9	P.18	P.13	P.14	P.17	P.20	P.16	P.7	P.15	
F	2	1	10	6	8	10	8	10	6	7	68
%											41.20

The literature review of AL has a higher number of existential processes compared with IT. 97 existential processes are used in the literature review of AL, whereas only 68 existential processes are used in the literature review of IT. This can be attributed to the higher number of citations used in the literature review chapter of AL. However, existential processes were also among the lowest types of processes used in the literature review chapters of AL and IT theses. These types of processes were used with *there*. Other synonyms can be used to reflect existential processes, include examples, such as *exist* and *arise*. The few examples of using this structure *there be* in the sources that EFL Arab postgraduates read may be a reason for their low use in writing the literature review chapter of their PhD theses.

Based on the abovementioned discussions related to the types of processes in the literature review chapters of Applied Linguistics and Information Technology, Figure 4.13 summarizes the number of frequencies for each type of processes used in the clause of the citations.

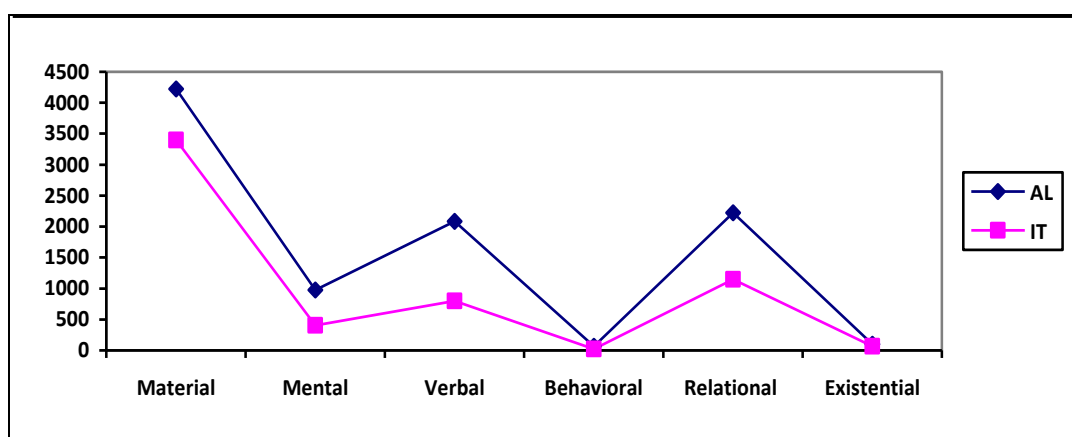


Figure 4.13. Processes in the literature review chapters of AL and IT

In summary, six types of processes were found in the citations of the literature review chapters of AL and IT theses. The main issue in using these processes is the dominance of material processes in the literature review chapters of the two groups of theses in spite of their different domains of knowledge. Using material processes in the hard domain such as IT seems reasonable and convincing since they reveal real-world and tangible actions. On the other hand, overusing the material processes in the soft domain such as AL is contrasting to the conventions of using processes. This may shed light on the perceptions that EFL PhD Arab postgraduates use in order to increase the credibility of their studies. Their unawareness of the implied evaluation of these types of processes probably is the other reason for the overuse of material processes in the soft domain. Another noticeable aspect is the dominance of relational processes, particularly intensive processes in IT theses following the material processes. For the hard domains like IT, intensive processes add a kind of authenticity to studies in the hard domains because they show issues as if they real and true.

In the following subsection, the explanation addresses the role of the cited author as a participant that is associated with the types of the processes used in each clause of the citations.

#### **4.2.2.2 Roles of the Cited Author Associated with Processes**

Based on the findings resulted from analysing the clauses of the citations, the cited author has several experiential meanings associated with the processes types. Thus, the cited author under the experiential meanings functions as an Actor, a Goal, a Senser, a Phenomenon, a Sayer, a Verbiage, a Behaver, a Carrier, an Atttribute, a

Carrier: Possessor, a Token, a Value, and an Agent: Attributor'. The following explanations clarify each functional role of the cited author based on each process used in each clause of the citations.

#### 4.2.2.2.1 Author: Actor

The cited Author functions as an Actor based on the processes types, such as *examined, carried out, investigated, and explored*. These are called material processes that were used in the clauses of the citations. These are processes of Doing, representing concrete and real tangible actions, as in examples (1) and (2).

- (1) *Muller (2005, p. 41) used videos to teach students certain vocabularies using some stories and subjects from the textbooks in his classroom. (P.6/AL/IR/S.2.8.1/Pr.2/L.371-372/Pg.40)*
- (2) *Wlodarsky and Walters (2006), and Munoz (2007) used mixed-methods. (P.5/AL/YE/S.2.4.6/Pr.3/L.577-578/Pg.57)*

In example (1), two participants are involved with the material process *used*. One of these participants is represented by the cited author *Muller* that functions as the *Actor*. Thus, the cited author functioning as an Actor is the constituent of the clause that performs the action or does the deed. Similarly, in example (2), the names of the cited authors *Wlodarsky and Walters (2006), and Munoz (2007)* are a nominal constituent that functions as the *Actor* participant. The cited author functioning as an *Actor* in the active is conflated with the Mood function of the *Subject* at the interpersonal meanings; the roles of the *Actor* and *Subject* are mapped onto the same constituent in active clauses.

#### 4.2.2.2.2 Author: Goal

The cited author functions as a *Goal* participant with clauses that include material processes. This *Goal* is the participant at whom the process is directed and the

action is extended. This participant is the direct object in the traditional grammar, and it maps onto the Complement participant in the Mood analysis of the interpersonal meanings, as in example (1).

- (1) *Most researchers have adopted **Salager-Meyer's (1994) approach** in dealing with hedges and boosters in different contexts. (P.4/AL/YE/S.2.4.1/Pr.1/L.211-213/Pg.48)*

The name of the cited author Salager-Meyer's, which is a part of a nominal group, has the function of the Goal under the experiential meaning based on the material process adopted. The same constituent has the function of a Complement under the interpersonal meanings. Thus, the Complement of the interpersonal meaning and the Goal of the experiential meanings are mapped onto the same constituent when used in active clauses.

#### 4.2.2.2.3 Author: Senser

The cited author functions as a Senser participant depending on the mental processes, such as think, believe, view, and feel that were used in the clause of the citations. This Senser participant feels, thinks or perceives the phenomenon, as in examples (1), (2), and (3).

- (1) *In other words, **Kaplan** believes that as children acquire their native language, they also acquire acceptable forms of rhetorical patterns, which differ from culture to culture and which affect their L2. (P.4/AL/YE/S.2.6/Pr.1/L.600-603/Pg.66-67)*
- (2) ***Mehlinger** (1995, p. 3) feels that there is no need to be careful and thoughtful in editing the materials. (P.6/AL/IR/S.2.9.1/Pr.5/L.919-920/Pg.68)*
- (3) ***Kolb** (1984) also perceived reflective practice as an essential element of learning. (P.5/AL/YE/S.2.2/Pr.2/L.27-28/Pg.32)*

In examples (1), (2), and (3), the cited authors Kaplan, Mehlinger, and Kolb function as the Senser under the experiential meanings based on the mental processes believes, feels, and perceived used, respectively.

#### 4.2.2.2.4 Author: Phenomenon

The other participant that is involved in the clauses of the mental processes is called the Phenomenon'. In such a clause, the constituent is a nominal group which is represented by the cited author as a part of it, as demonstrated in example (1).

- (1) *Varadi's (1973) talk, published only in 1980, given at a small European conference is considered as the first systematic explanation of strategic language behaviour.* (P.19/AL/YE/S.2.5.1/Pr.2/L.211-212/Pg.12)

In example (1), the mental process considered' is used, whereby the cited author Varadi' is a part of a nominal group that functions as a Phenomenon' participant. The clause with the mental process is considered' is in passive; therefore, the Phenomenon' at the experiential meanings is not conflated with the Complement' at the interpersonal meanings.

#### 4.2.2.2.5 Author: Sayer

Clauses with verbal processes, such as *point out, suggest, propose, indicate, argue, and say*, can contain the Sayer' participant. The cited author in such clauses functions as the Sayer', who is a conscious participant, is responsible for the verbal processes, and is capable of putting out a signal, as in examples (1) and (2).

- (1) *Adams (2001) states that the meaning of politics stands for the sense of direction and people's perception for having a better society as this is the aim of ideology itself.* (P.12/AL/IR/S.2.15/Pr.4/L.1165-1166/Pg.74)
- (2) *Meanwhile, [39] proposed a replica placement scheme that tries to overcome the bottleneck caused by increasing the downlinks, which are occurring at the same time.* (P.15/IT/PA/S.2.4.8/Pr.4/L.486-487/Pg.37)

The cited author Adams' in example (1) and the Numbering System ,[39]' that is used to replace the name of the cited author in example (2), play the functional role

of the *\_\_Sayer* under the experiential meanings based on the verbal processes *\_\_argue* and *\_\_propose* used, respectively. Similar to the conflation of the *\_\_Actor* with role of the *\_\_Subject* in active clauses, the cited author as a *\_\_Sayer* is also mapped onto the same constituent of the cited author as a *\_\_Subject* in active clauses.

#### 4.2.2.2.6 Author: Verbiage

The cited author can also function as the *\_\_Verbiage* participant when used in clauses with verbal processes. The *\_\_Verbiage* is a nominal statement of the verbal process which represents or expresses a kind of verbal behaviour, as in example (1).

- (1) *Swales (1990) agreed with **Paltridge** that the names of genres given by the discourse community “constitute valuable ethnographic communication”, however he emphasized that these names “typically need further validation” (p. 58). (P.2/AL/JO/S.2.2.3/Pr.4/L.459-462/Pg.39)*

Similar to the functional role of the cited author as a *\_\_Goal*, the cited author functioning as a *\_\_Verbiage* in active clauses is conflated with the author's role as a *\_\_Complement* at the interpersonal meanings.

#### 4.2.2.2.7 Author: Behaver

The cited author also functions as a *\_\_Behaver* participant when used in clauses with behavioural processes. The *\_\_Behaver* participant represented by the cited author is a conscious being as demonstrated in examples (1) and (2).

- (1) *In examining the discourse of higher education, **Fairclough** (1993) noticed interdiscursivity or mix not only on the discourse level, but also on the genre and style levels. (P.2/AL/JO/S.2.3.2/Pr.3/L.770-772/Pg.52)*
- (2) *In order to answer this question, **Baron** (1998) looked at the social dynamics, email format, grammar and style of email (see table 2.2 below). (P2/AL/JO/S.2.4.2/Pr.2/L.1171-1172/Pg.71)*

In examples (1) and (2), the behavioural processes *noticed* and *looked at* are used in the clauses of the two citations, respectively. In each clause, the cited author *Fairclough* in example (1) and *Baron* in example (2) function as the *Behaver*. Similarly, the *Behaver* is mapped onto the *Subject* constituent at the interpersonal meanings when used in active clauses.

#### 4.2.2.2.8 Author: Carrier

In active clauses that included relational intensive processes, the relationship between the two terms (Carrier) and (Attribute) is one of the sameness. In such clauses, the cited author functions as the *Carrier* that is realized as a nominal group or a pronoun constituent, as demonstrated in example (1).

- (1) *Halliday's (1985) approach is functional grammar as opposed to „formal grammar“ and functional as it intends to interpret the text, the system and the linguistic structures.*  
(P.2/AL/JO/S.2.2.1/Pr.1/L.176-178/Pg.26)

In citation (1), the clause involves the attributive intensive process *is*. In this clause, the cited author is a part of a nominal constituent that functions as the *Carrier*. Similar to the functional role of the cited author as an *Actor*, a *Senser*, a *Sayer*, and a *Behaver*, the functional role of the cited author as a *Carrier* conflates with the functional role of the cited author as a *Subject* at the interpersonal meanings in active clauses.

#### 4.2.2.2.9 Author: Attribute

In active clauses that include relational intensive processes, the second constituent following the process is called the *Attribute* that is realized as a nominal group. The cited author in such clauses functions as the *Attribute*, as demonstrated in examples (1) and (2).

- (1) *It was **Lakoff** (1972) who used the term “hedging” in its real sense to point to “words whose job is to make things fuzzier or less fuzzy.” (P.4/AL/YE/S.2.2.1/Pr.2/L.35-37/Pg.39)*
- (2) *It is **Chomsky’s** (1965, p.3) **idealized way** in approaching language that aims to specify the universal principles which characterize the innate structure of language. (P.1/AL/IR/S.2.3.1/Pr.2/L.62/64/Pg.33)*

In example (1), the relational intensive process *was* is used in the clause of the citation, in which the cited author *Lakoff* functions as the *Attribute*. In example (2), the clause that includes the relational intensive process *is* involves the cited author as a part of a nominal constituent to function as the *Attribute*. The author as an *Attribute* is conflated with the functional role of the cited author as a *Complement* at the interpersonal meanings.

#### 4.2.2.2.10 Author: Token

In clauses that include identifying intensive processes, the cited author functions as the *Token*, as in example (1).

- (1) ***Dewey** (1933) and **Schon** (1983, 1987) are two of the most cited contributors to foundational concepts of reflective practice (York-Barr et al., 2006). (P.5/AL/YE/S.2.2/Pr.3/L.29-30/Pg.32)*

In example (1), the citation includes the clause with the identifying intensive process *are*, in which the cited author functions as the *Token*. The functional role of the cited author as *Token* is conflated with the functional role of the author as a *Subject* in active clauses.

#### 4.2.2.2.11 Author: Value

In clauses with identifying intensive processes that are reversible, the cited author can be a nominal constituent that functions as a *Value*, as in example (1).

- (1) *Several researchers have delved into the notion of writing stages and among them are **Emig (1977); Perl (1980); and Sommers (1980).*** (P.3/AL/JO/S.2.2/Pr.2/L.61-62/Pg.23).

The cited authors *Emig, Perl, and Sommers* in example (1) are a nominal constituent used in the clause with the relational intensive process *are*. In such a usage, the cited author functions as a *Value*. The functional role of the cited author as a *Value* is conflated with the functional role of the author as a *Complement* at the interpersonal meanings in active clauses.

#### 4.2.2.2.12 Author: Carrier ‘Possessor’

In clauses with the relational possessive processes, the relationship between the two terms is one of the ownership; one entity possesses the other. In such clauses, the cited author plays the functional role of the *Carrier: Possessor*, as demonstrated in examples (1) and (2).

- (1) *Al-Samawi’s study, however, (1995) has some weaknesses.* (P.19/AL/YE/S.2.8.2/Pr.8/L.868-870/Pg.51)
- (2) *Romaine (1994) for instance has one such definition where a speech community is defined as a group of people not necessarily sharing the same language yet sharing a set of rules and norms for the use of language.* (P.1/AL/IR/S.2.4/Pr.1/L.278-280/Pg.43)

In example (1), the citation includes a clause with the relational possessive process *has*. In this clause, the name of the cited author *Al-Samawi* is a part of the nominal constituent *Al-Samawi’s study* that functions as a *Carrier: Possessor*. In example (2), the citation also consists of a clause with the relational possessive process *has*, in which the cited author *Romaine* functions as the *Carrier: Possessor*. The functional role of the cited author as a *Carrier: Possessor* conflates with the functional role of the cited author as a *Subject* in active clauses at the interpersonal meanings.

#### 4.2.2.2.13 Author: Agent ‘Attributor’

The nominal group *‘Gardner’s and Lambert’s (1972) research’* in example (1) below functions as an *‘Agent: Attributor’* since it is used with a causative process.

The names of the cited authors *‘Gardner and Lambert’* are a part of this nominal group.

- (1) ***Gardner’s and Lambert’s (1972) research** led them to propose two types of motivation in language learning: an integrative motivation reflecting a sincere and personal interest in the people and culture of the target language, and an instrumental motivation reflecting a pragmatic aspect and advantages of learning the target language.*  
(P.19/AL/YE/S.2.11.2/Pr.1/L.1003-1007/Pg.60)

In summary, the cited author plays several functional roles, including an *‘Actor’*, a *‘Goal’*, a *‘Senser’*, a *‘Phenomenon’*, a *‘Sayer’*, a *‘Verbiage’*, a *‘Behaver’*, a *‘Carrier’*, an *‘Attribute’*, a *‘Token’*, a *‘Value’*, a *‘Possessor’*, and an *‘Agent: Attributor’*. These roles are determined by the type of the process used in each clause under the experiential meanings. Table 4.18 summarizes the functional roles of the cited author that are associated with the processes types under the experiential meanings.

Table 4.18

*Roles of the Cited Author Associated with Processes*

Cited author’s roles	AL		IT		Total
	Frequency	Percentage	Frequency	Percentage	
Sayer	1160	73.97	408	26.2	1568
Actor	589	54.28	496	45.71	1085
Senser	219	78.49	60	21.50	279
Goal	114	67.05	56	32.94	170
Carrier	68	79.07	18	20.93	86
Attribute	28	68.29	13	31.70	41
Carrier (Possessor)	24	77.41	7	22.58	31
Verbiage	18	81.81	4	18.18	22
Behaver	16	80	4	20	20
Phenomenon	10	90.90	1	9.10	11
Value	5	55.55	4	44.44	9
Token	4	100	-	-	4
Agent <i>‘Attributor’</i>	1	100	-	-	1

Table 4.18 demonstrates that the functional role of the cited author as a Sayer‘ dominates the literature review chapter of Applied Linguistics. This may reflect the tendency of the EFL Arab students to highlight the name of the cited author who states, argues, mentions or indicates. In soft domains like AL, theses are based on arguments. Therefore, verbal processes used with the cited authors are emphasized. On the other hand, the functional role of the cited author as an Actor‘ dominates the citations in the literature review chapter of IT PhD theses. Hard domains such as IT are based on facts. Consequently, material processes used with the cited authors are used with high frequencies in order to denote real and tangible actions that really happened. The variety in using the cited author is also clear in having the role as a Token‘, and as an Agent: Attributor‘ in the literature review chapter of Applied Linguistics only. These differences in using the roles of the cited author reflect the effect of the field as a register variable. In other words, disciplinary influence affects the use of the roles of the cited author in the literature review chapter of two different disciplines. Similarities are also found in assigning the cited author high frequency roles that are associated with the verbal, material and mental processes in the literature review chapter of AL and IT. The way EFL Arab postgraduates read and interpret the findings of the original sources may affect their way of citing and using the name of the cited author with the processes.

In the following subsection, there is an explanation of the Circumstantial‘ as another unessential constituent that is involved in the clauses under the experiential meanings.

#### 4.2.2.3 Circumstantial

Circumstances are realized through prepositional constituents. These circumstantial elements can occur with the different types of processes, such as material, verbal, mental, behavioural, relational, and existential. Circumstantial elements can reveal different types of meanings, such as extent, location, manner, cause, accompaniment, matter, role, and agent. The following discussions demonstrate the use of such circumstantial elements in the literature review chapter of AL and IT theses by EFL PhD Arab postgraduates.

##### 4.2.2.3.1 Circumstance of Extent

Circumstance of extent is concerned with time and space and answers questions like how far for distance, how long for duration, and how many times for duration. Circumstantial of extent can involve the preposition *for* as in the prepositional constituent *for decades* in example (1) below.

- (1) *Indeed, Chomsky's theory has been criticized **for decades** by researchers such as Hudson (1980, p.6) who referred to this idealism as „imaginary world“.* (P.1/AL/IR/S.2.3.1Pr.4/L.89-90/Pg.34)

##### 4.2.2.3.2 Circumstance of Location

Circumstance of location is realized through a prepositional phrase that is concerned with the place and the time of the process. Circumstances of location answer the questions of when and where; *when* refers to time, whereas *where* refers to place, as in examples (1), (2), (3), (4), (5), and (6).

- (1) *It was only **in the first works of Uriel Weinreich (1963), Charles Ferguson (1959) and Joshua (1965)** that attention to topics such as diglossia and language contact was drawn.* (P.1/AL/IR/S.2.3.2/Pr.1/L.101-104/Pg.35)

- (2) *Thus, sociolinguistics argue that language exists **in social context** and it is „å very social phenomenon“ (Trudgill, 2000, p.21) (P.1/AL/IR/S.2.2/Pr.1/L.22/23/Pg.31)*
- (3) *Moreover, the present study adopts the OCSs appeared **in Tarone’s (1977) taxonomy with their terminologies.** (P.19/AL/YE/S.2.6/Pr.1/L.555-556/Pg.33)*
- (4) *Details on how to set RTO value are available **in [57].** (P.7/IT/SY/S.2.1.3/Pr.2/L.72-73/Pg.21)*
- (5) *Evidently, Larris (2004) indicates that, **in the last few years**, candidates have appeared in more than one LNTS in order to soften their character traits and gain exposure to their voters. (P.12/AL/IR/S.2.5/Pr.2/L.299-301/Pg.35)*
- (6) ***In the mid 1980s**, Arab sociolinguistics started to realize that linguistic variation did not occur mainly as a result of the impact of the standard on the Arabic dialects (Bassiouny, 2009) (P.1/AL/IR/S.2.7/Pr.1/L.421-423/Pg.50)*

The prepositional constituents *in the first works of Uriel Weinreich* in example (1), *in social context* in example (2), *in Tarone’s (1977) taxonomy* in example (3), and *in [57]* in example (4) refer to Location: Place. The other prepositional constituents including *in the last few years* in example (5) and *in the mid 1980s* in example (6) refer to Location: time.

#### 4.2.2.3.3 Circumstantial of Manner

Circumstance of manner is concerned with the way of actualising the process. Hence, manner may involve several subtypes, including means, quality, and comparison, as in examples (1), (2), (3), and (4).

- (1) *One of the main weaknesses of Dastjerd and Shirzad’s (2010) study is that it adopted a one-group pretest-posttest experimental design **without a control group.** (P.4/AL/YE/S.2.4.3/Pr.15/L.452-453/Pg.59)*
- (2) *These levels can be employed **individually, with peers, in small groups of colleagues** and also **with wide social community** (York-Barr et al., 2006) (P.5/AL/YE/S.2.2.7/Pr.1/L.268-270/Pg.43)*
- (3) *Jones (1985) conducted a similar study **as Zamel’s (1983) study.** (P.3/AL/JO/S.2.3.5/Pr.8/L.675/Pg.52)*
- (4) *However, **unlike Martin and Halliday**, he suggested using ethnographic methods such as interviews and observations. (P.2/AL/JO/S.2.1/Pr.9/L.140-141/Pg.25)*

Circumstance of manner is expressed through prepositional constituents or adverbial constituents, such as „*without a control group*” in example (1) and „*individually*”, „*with peers*”, „*in small groups of colleagues*”, and „*with wide social community*” in example (2) to refer to means. The other circumstantial constituents „*as Zamel’s (1983) study*” in example (3) and „*unlike Martin and Halliday*” in example (4) refer to comparison. In the two examples (3) and (4), the name of the cited author forms a part of the prepositional constituent to function as the ‘Circumstantial: Manner’. More discussions and details about the role of the cited author as ‘Circumstantial: Manner’ are explained later.

#### 4.2.2.3.4 Circumstance of Cause

Circumstance of cause implies the reason for why a process takes place, and this may refer to a reason, a purpose, and/or on behalf, as demonstrated in example (1).

- (1) *Due to this analysis, they proposed TCP with Adaptive Delayed Acknowledgement (TCP-ADA) as a receiverside solution, which is an attempt to reduce the number of ACKs to one per window.*  
(P.7/IT/SY/S.2.3.2.2/Pr.4/L.956-958/P.65)

In example (1), the prepositional constituent „*Due to his analysis*” refers to the circumstance of cause: reason.

#### 4.2.2.3.5 Circumstance of Accompaniment

Circumstance of accompaniment is concerned with revealing to the reader the joint participation in the process that takes place. This is demonstrated in examples (1) and (2).

- (1) *Moreover, the present study adopts the OCSs appeared in Tarone’s (1977) taxonomy with their terminologies.* (P.19/AL/YE/S.2.6/Pr.1/L.555-556/Pg.33)
- (2) *It is staged as it usually takes us a number of steps to achieve our goals, goal-oriented as we use it to achieve goals, and social as we*

use genre **with other people** (Martin and Rose, 2007).  
(P.2/AL/JO/S.2.2.1/Pr.7/L.253-255/Pg.30)

The prepositional constituents „*with their terminologies*” in example (1) and „*with other people*” in example (2) realize the Circumstantial of Accompaniment.

#### 4.2.2.3.6 Circumstance of Matter

Circumstance of matter is realized through a prepositional constituent and is concerned with what that matter is, as in the prepositional constituent „*For Fairclough*” in example (1).

- (1) ***For Fairclough*** (1992), *intertextuality could be distinguished into manifest intertextuality and constitutive intertextuality.* (P.2/AL/JO/S.2.3.1/Pr.2/L.703-705/Pg.49)

#### 4.2.2.3.7 Circumstance of Role

Circumstance of role implies the meaning of be and become that is realized through the preposition as, as in example (1).

- (1) ***As an essential element of an academic teacher and a reflective practitioner***, *reflection engages a teacher in continuous self-directed development* (Schon, 1983). (P.5/AL/YE/S.2.2.4/Pr.3/L.202-205/Pg.40)

#### 4.2.2.3.8 Circumstance of Agent

Circumstance of Agent is concerned with the real doer of the action; this is demonstrated in examples (1) and (2).

- (1) *A similar study was carried out **by Hassan** (2001) involving 182 third year students at the English Department in Mansoura University, Egypt.* (P.3/AL/JO/S.2.6.3/Pr.2/L.1473-1474/P.89)
- (2) *Recently, the idea of reflective practice has been adopted and developed **by many researchers*** (Akbari, 2007;.....) (P.5/AL/YE/S.2.2/Pr.4/L.55-58/Pg.33)

The circumstance of agent is realized by a prepositional constituent involving the name of the cited author *by Hassan* in example (1), or other general nouns such as *by many researchers* in example (2). Table 4.19 demonstrates the number and percentage of using the circumstantial in the citations of the literature review chapters of AL and IT.

Table 4.19

*Circumstantial in the Literature Review of AL and IT Theses*

Discipline	Extent	Location	Manner	Cause	Accompaniment	Matter	Role	Agent	Others
AL									
F	29	2181	882	224	22	422	434	373	23
%	80.55	65.53	61.64	44.44	64.70	65.22	69.44	65.21	57.5
IT									
F	7	1147	549	280	12	225	191	199	17
%	19.45	34.47	38.36	55.56	35.30	34.78	30.56	34.79	42.5
Total	36	3328	1431	504	34	647	625	572	40

Based on the findings related to the *Circumstantial*, EFL PhD Arab postgraduates in AL and IT are similar in using a high percentage of *Circumstantial* to refer to location, followed by *Circumstantial* that refers to manner. This similarity in using *Circumstantial* in two different fields may be attributed to the educational and cultural backgrounds of EFL PhD Arab postgraduates that affected students' use of the *Circumstantial* in citations. Another reason for using the *Circumstantial: Location* with a high percentage is the strategies of EFL Arab postgraduates to introduce more details to the clause of the citation in order to increase the credibility of the reported information and persuade the readers of their writings. The repeated

use of prepositional constituents such as *‘in another study’, in [11]’* and other similar examples clarify such rhetoric strategies.

The high use of the *‘circumstantial’* constituents in the literature review chapter of Applied Linguistics can be probably attributed to the density of the citations. Expanding the explanations by adding prepositional constituents to make their writings more persuasive and argumentative may be the other reason. However, the low use of such *‘Circumstantial’* in the literature review chapter of IT can be attributed to the low density of citations. The effect of field as a hard domain that focuses on facts might make EFL Arab postgraduates in this discipline focus more on what is essential in structuring the clause. Their lack of vocabulary in using the circumstantial constituents may be the other reason.

In conclusion, the circumstantial represents another constituent of the clause under the experiential meanings. The information that the circumstantial adds is not essential but it adds more clarity to the understanding of the message delivered by the clause. These circumstantial constituents were employed with a sort of similarity as well as differences in the citations of the literature review chapters of IT and AL theses.

#### **4.2.2.4 Author as Circumstantial**

The role of the cited author as Circumstantial under the experiential meanings adds more meanings to the clause. In such clauses, the cited author is a circumstantial constituent that can play different functional roles including an Agent, a Location (Place), a Manner (Comparison), an Accompaniment and a Matter. The role of the

author as Circumstantial is subcategorised in the following subsections and supported with examples from the literature review chapters of PhD theses by EFL PhD Arab postgraduates.

#### 4.2.2.4.1 Author: Agent

The cited author can function as the Agent preceded mainly by the preposition by as in example (1).

- (1) *The TCP NewReno variant was proposed in 1995–1996 by **Floyd et al.** [37], which is a modification of TCP Reno to recover multiple losses that occurs within the same window, thus improving retransmissions during the fast recovery phase (as illustrated in Figure 2.4). (P.7/IT/SY/S.2.1.4.3/Pr.4/L.217-220/Pg.28-29)*

In example (1), the cited author (*..Floyd et al...*) is a prepositional constituent preceded by the preposition by and functions as a Circumstantial: Agent. The functional role of the cited author as Circumstantial: Agent is conflated with the functional role of the cited author as an Adjunct at the interpersonal meanings. However, in other uses, the name of the cited author, functioning as a Circumstantial: Agent, is not mentioned explicitly. Rather, only the preposition by is used to refer to the cited author as an Agent and expressed by numbers in brackets used in IT PhD theses that employed Numbering System in citations, as in example (2).

- (2) *Meanwhile, an optimal replication strategy (DORS) has been proposed by [111], where the authors empirically inferred a threshold to decide whether to replicate the file or not. (P.15/IT/PA/S.2.4.5/Pr.10/L.322-324/Pg.28)*

In example (2), the name of the cited author is not stated explicitly. Nevertheless, it is still considered an integral citation, where the cited author has a functional role of an Agent in the clause.

#### 4.2.2.4.2 Author: Location (Place)

In this type of the functional roles, the name of the cited author functions as the place from which a piece of information was cited by the citing writer. Thus, in such a use, the name of the cited author does not refer to the author him/herself, rather it refers to the place from which the information is reported, as in example (1).

- (1) *In her research, she used different types of authentic materials, namely newspapers and videos.* (P.6/AL/IR/S.2.8.1/Pr.13/L.472-473/Pg.44)

In example (1), the name of the cited author is replaced by a possessive adjective and used with a prepositional constituent „*in her research*” to refer to the place of the cited information. The name of the cited author functioning as Location: Place may not be used explicitly as in IT PhD theses that used Numbering System. In such clauses, only the preposition in is used and is followed by the number of citation as in example (2) below.

- (2) *Types, details, and flavors of TCP protocol can be found in [36, 37, 38, 59, 60].* (P.7/IT/SY/S.2.1.4/Pr.2/L.86-87/Pg.22)

In some examples expressed mainly by the expression According to..., the cited author has the function of the Location: (Place). The cited author may be considered as the source rather than the person him/herself, as in example (3).

- (3) *According to Biber, et al. (1998), language is distinguished by structure and use.* (P.2/AL/JO/S.2.1/Pr.1/L.24-25/Pg.20)

When the name of the cited author is used as a part of a prepositional constituent, the name of the cited author refers to the study rather than the author. Hence, several examples of citations were employed to reveal such a usage. In the citation, *TCP protocol can be found in [36, 37, 38, 59, 60]*, the name of the cited author was

replaced by numbers to refer to the source. Similarly, the prepositional constituent According to Biber, et. al. (1998),... can refer to the source rather than the author.

#### 4.2.2.4.3 Author: Manner ‘Comparison’

The cited author plays the functional role of the Circumstantial: Manner (Comparison) when used to compare the cited author with other authors or other studies. In such a use, the cited author is a part of a prepositional constituent that refers to either his/her study, methodology, or findings to compare them with other authors’ studies or findings, as in examples (1) and (2).

- (1) ***In line with Hillock’s study**, Anderson, Saden and Hunter (2001) examined the writing of 30 undergraduate psychology students. (P.4/AL/YE/S.2.7/Pr.4/L.722-723/Pg.72)*
- (2) *For these reasons, Manjet [24] proposed a screening design **like Plackett and Burman’s designs** to determine the critical security controls. (P.16/IT/YE/S.2.5.7/Pr.1/L.617-619/Pg.47)*

In both examples (1) and (2), the names of the cited authors Hillock in example (1) and Plackett and Burman in example (2) are used to function as Circumstantial: Manner (Comparison) to compare their methodology or goals with other authors’ studies.

#### 4.2.2.4.4 Author: Matter

In such a use, the cited author plays the functional role of the Circumstantial: matter, as demonstrated in examples (1) and (2). This element corresponds to the interrogative what about? and is expressed by a prepositional phrase including examples such as As for John, with reference to, etc. Using the name of the cited author as a part of a prepositional phrase makes him/her thematically marked and prominent.

- (1) **For van Dijk** (1998), ideologies are „the world views“ through which “social cognition” is formulated (p.258). (P.12/AL/IR/S.2.15/Pr.6/L.1188-1190/Pg.75)
- (2) **For Hasan** (1977, 1985), the genre of a social event may be identified by examining the text-ness or the characteristics that make the text what it is. (P.2/AL/JO/S.2.2.1/Pr.8/L.263-264/Pg.30)

In both examples, (1) and (2), the cited authors van Dijk and Hasan are a part of a prepositional constituent that functions as Circumstantial: Matter.

#### 4.2.2.4.5 Author: Accompaniment

The name of the cited author can be a part of a prepositional constituent that functions as an Accompaniment, as in example (1). This element represents the meanings and, or, not as circumstantial. It corresponds to the interrogatives and who, what else. It is expressed by prepositional phrases using prepositions, such as with, besides, and without.

- (1) „The shift started with **Labove’s** (1966, 1972a; Trudgill, 1974) view of style variation as different levels....” (P.1/AL/IR/S.2.3.2/Pr.6/L.142-146/Pg.37).

In example (1), the name of the cited author Labove is a part of a prepositional constituent that functions as the Accompaniment. This role is conflated with the role of the cited author as an Adjunct under the interpersonal meanings. In summary, the cited author, when used as a prepositional constituent, plays several functional roles under the experiential meanings to add secondary information to the clause. These functional roles of the cited author are represented mainly by Circumstantial: Agent, Location: Place, Manner (Comparison), Accompaniment and Matter, which are demonstrated in Table 4.20. Based on the findings related to the cited author’s role, Table 4.20 shows the dominance of the Circumstantial: Location in both fields represented by AL and IT. This reveals the tendency of the EFL Arab

students to give more details about previous studies by referring to the location or time of the study involving the name of the cited author.

Table 4.20

*Role of the Cited Author as Circumstantial*

Author as circumstantial	AL		IT		Total
	F	%	F	%	
Location (Place)	346	71.48	138	28.51	484
Agent	177	73.14	65	26.85	242
Matter	39	86.66	6	13.33	45
Manner (Comparison)	36	80	9	20	45
Accompaniment	4	80	1	20	5
Others	21	80	14	40	35

Author as Circumstantial: location is followed by the role as Circumstantial: Agent in both fields. These similarities may be attributed to the educational background or the cultural background of the EFL Arab students. Field as another register variable also affects the use of the cited author by means of the higher frequency of the roles of the cited author in the literature review of AL.

#### 4.2.2.5 Summary of the Experiential Meanings

The experiential meaning represents one aspect of the ideational metafunction. It focuses mainly on the Transitivity System in order to reveal the actions that really happened. Hence, the Transitivity System involves several processes, such as material, verbal, mental, behavioural, relational and existential. Each clause has only one process that involves other nominal constituents called participants with different functional roles. These participants have roles based on each process. For example, the material process involves two participants; one of them is the *Actor*, whereas the other one is the *Goal*. Circumstantial that is realized by prepositional

constituents also forms a constituent of the clause under the experiential meanings. In the integral citations, the name of the cited author formed a constituent that has a role. For example, when it occurred as a nominal constituent or a part of a lengthy noun group, it has a function that is associated with the processes, such as an ‘Actor’ or a ‘Goal’ with material processes. In addition, when it occurred as a part of a prepositional constituent, it has the role of the Circumstantial to refer to Location, agent, or other circumstantial roles.

#### **4.2.3 RQ 1: Objective Two, Part Two (Logical Meanings)**

This section discusses the findings of objective two (Part Two) of research question one. As it was mentioned earlier in explaining the findings of objective two (Part One), the ideational metafunction of language consists of two aspects: the experiential meanings and the logical meanings. First, the experiential meaning is concerned with the functional organisation of the clause to express the content ‘meaning about the world’ via the Transitivity System of English. Second, the logical meaning is concerned with the logical structure of the clause complex, which consists of more than one clause. The logical meanings deal with taxis and logico-semantics. These terms were used by Halliday (1985) to realize the relationship between clauses in clause complexes.

The former, taxis, is concerned with the way adjacent clauses are linked to each other through relations of dependency (hypotactic) or interdependency (paratactic). As for logico-semantics, they are associated with the types of meanings which allow adjacent clauses to expand or project on each other. Hence, this part of objective two addresses the issue of the logico-semantic relationships between clauses of citations

within a clause complex. Clause complexes can explain the full functional organisation of the sentence. In the present study, each citation was analysed separately considering it as a sentence that is realized between two dots. This sentence can be one single clause (a clause simplex) or more than one clause (a clause complex).

- (1) *Types, details, and flavors of TCP protocol can be found in [36, 37, 38, 59, 60]. (P.7/SY/IT/S.2.1.4/Pr.2/L.86-87/Pg.22)*
- (2) ***Hyland (1994) further comments*** *that hedges and boosters are two significant metadiscourse elements.* (P.4/YE/AL/S.2.9.2/Pr.3/L.906-907/Pg.81)

The citation in example (1) is a sentence that is realized by two dots, and it consists of only one clause (a clause simplex). However, this type of clauses is not covered in the logico-semantic relation since a logico-semantic relation realizes the relationships between clauses in a clause complex rather than a clause simplex. On the other hand, the citation in example (2) is the main focus in this part of objective two that deals with the logical meanings of clause complexes. For instance, in example (2), (*Hyland (1994) further comments....*) is a clause which functions as a projecting clause and (*.....that hedges and boosters are two significant metadiscourse elements*) is the second clause that functions as a projected one.

- (3) ***In addition, Daly and Wilson's (1983) study has also stressed on self-concept, and oral communication apprehension,*** *while Onwuegbuzie (1998) concentrates on the relationship between writing apprehension and learning styles.* (P.3/JO/AL/S.2.6/Pr.3/L.1373-1376/Pg.84)
- (4) ***According to Peppard and Ward (2004), service quality recognizes*** *that the provision of some IT services will be based around a customer-supplier relationship.* (P.17/JO/IT/S.2.7.2/Pr.5/L.798-799/Pg.63)

In the logico-semantic relations between clauses of the citation, clauses are related through either *Expansion* or *Projection*. In *Expansion*, as in example (3) above, one clause (*...while Onwuegbuzie (1998) concentrates on the relationship between writing apprehension and learning styles*) develops or extends the meaning of the primary clause (*In addition, Daly and Wilson's (1983) study has also stressed on self-concept, and oral communication apprehension...*). On the other hand, in *Projection*, one clause reports or quotes another clause, involving either locution (quoting speech) or idea (reporting thoughts). Hence, example (4) is a clause complex realizing *Projection* as a logico-semantic relation between the two clauses, with one clause functioning as a projecting clause (*According to Peppard and Ward (2004), service quality recognizes....*), whereas the other clause functions as a projected one (*.....that the provision of some IT services will be based around a customer-supplier relationship*).

In the following explanation, *Expansion* and *Projection* are presented as the two logico-semantic relationships of complex clauses used in the citations by EFL PhD Arab postgraduates in the literature review chapters of PhD theses in AL and IT.

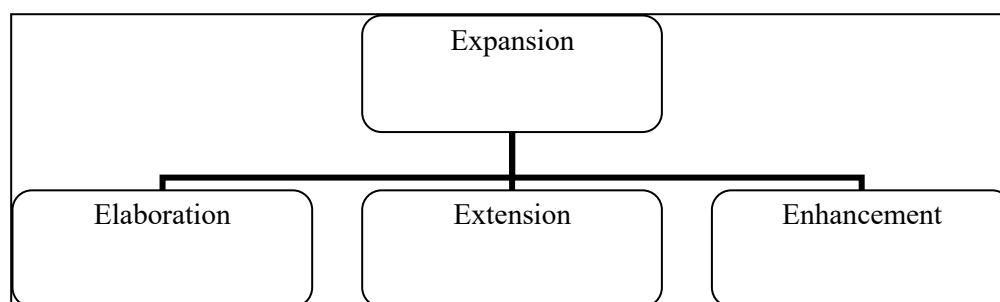


Figure 4.14. Expansion in citations with clause complexes

#### 4.2.3.1 Expansion

Figure 4.14 illustrates the subtypes of *Expansion* that realizes the logico-semantic relationships of clause complex in citations. *Expansion* is used as one of the logico-semantic relationships in citations with clause complexes. EFL PhD Arab postgraduates use three subtypes to expand the clause complexes including *Elaboration* (restatements), *Extension* (addition), and *Enhancement* (development). Citations with *Expansion* are used dominantly in the literature review chapter of IT theses. 1156 (72.56%) citations are used to realize *Expansion*. On the other hand, 1,426 (53.48%) citations in the literature review chapters of Applied Linguistics are employed to realize *Expansion*, as demonstrated in Table 4.21.

Table 4.21

<i>Expansion in the Literature Review of AL and IT Theses</i>				
<b>Discipline</b>	<b>Citations with clause complex</b>	<b>Citations with Expansion</b>	<b>Intra-disciplinary percentage</b>	<b>Inter-disciplinary percentage</b>
Applied Linguistics	2666	1426	53.48%	55.22%
Information Technology	1593	1156	72.56%	44.77%

As a logico-semantic relation between clauses of citations with a clause complex, *Expansion* is dominant in the literature review chapters of IT and AL theses in spite of their different fields and domains of knowledge. The high use of *Expansion* in both fields reflects the tendency of EFL Arab postgraduates to add new information, restate it or develop the idea by means of the second clause of the clause complex. Their similarity in terms of their educational, cultural and social backgrounds may be a reason for their dominant use of *Expansion* in citations. The main reason for the high use of *Expansion* is associated with the type of processes used in each clause of the citations.

It was shown in part one of objective two (Section 4.2.2.1.1) that EFL PhD Arab postgraduates used material processes more than other types of processes. Based on this finding, it seems that EFL Arab postgraduates used these material processes mainly in the primary clause of the clause complex. Another reason for the dominance of the Expansion can be due to the low use of the mental processes and verbal ones which are used basically in Projection rather than Expansion when used in the primary clause of the clause complexes. The intra-disciplinary comparison shows that EFL Arab postgraduates in IT depend greatly on Expansion (72.56%), whereas Expansion in AL was lower (53.48%) in spite of having more citations. This probably reveals the effect of field on using *Expansion* in citations. Another reason might be attributed to the overuse of material processes in the primary clause of clause complex in the citations of the literature review of IT.

*Elaboration*, *Extension*, and *Enhancement* are the three subtypes used by EFL Arab postgraduates to realize *Expansion* in citations with clause complexes.

Table 4.22

*Subtypes of Expansion in the Literature Review of AL and IT Theses*

Discipline	Elaboration	Extension	Enhancement
Applied	580	641	205
Linguistics	(40.67%)	(44.95%)	(14.37%)
Information	492	583	81
Technology	(42.56%)	(50.43%)	(7%)

Table 4.22 shows that *Expansion* in citations with clause complexes involve three main subtypes, which are *Elaboration*, *Extension*, and *Enhancement*. Using *Extension* as a logico-semantic relationship in citations more than *Elaboration* and

*Enhancement* implies the tendency of EFL Arab postgraduates to add information when using clause complexes in citations rather than restating, clarifying or enhancing what has been cited in the first clause of the citation. Although AL and IT belong to two different domains of knowledge, *Extension* is used more than the other subtypes in the literature review chapters of AL and IT PhD theses. *Elaboration* ranks second in terms of the number of occurrences in both AL and IT, whereas *Enhancement* occupies the lowest percentage. These similarities in the findings can be attributed to the similar educational, cultural, and social backgrounds of EFL Arab postgraduates. They may also lack information of the vocabulary and expressions that are used to clarify or enhance their ideas. Therefore, they attempt to cite and add information as much as possible in order to show to the readers their familiarity with their topic of studies.

#### **4.2.3.1.1 Elaboration**

In *Elaboration*, one of the two clauses in the clause complex elaborates on the meaning of the other clause. In other words, the secondary clause does not present new information, rather it either restates or adds a descriptive attribute or comments to the primary clause. In such a case, *Elaboration* under the paratactic relations between clauses of a clause complex involves three subcategories: *Exposition*, *Exemplification*, and *Clarification*. *Clarification* is used with a high percentage in AL and IT, followed by *Exposition*, whereas *Exemplification* is rarely used. This can be attributed to several factors, such as the effect of EFL Arab postgraduates' mother tongue. Arabic language has relative pronouns which are similar in use to the relative pronouns used in English; the relative pronouns *that* and *which* were used repeatedly in AL and IT. This language transfer resulted in using *Clarification* as a

subcategory with a higher percentage more than the other two subcategories of *Elaboration*. The percentage of using each subcategory of *Elaboration* is demonstrated in Table 4.23.

Table 4.23

<i>Subcategories of Elaboration in the Literature Review of AL and IT Theses</i>			
<b>Discipline</b>	<b>Exposition</b>	<b>Exemplification</b>	<b>Clarification</b>
Applied Linguistics	56 (9.65%)	11 (1.89%)	513 (88.44%)
Information Technology	20 (4%)	3 (0.6%)	469 (95.32%)

In *Exposition*, the second clause known as the secondary clause restates the first clause ‘the primary clause’ through reinforcing the content by means of punctuation (,)(;) or conjunctive expressions, such as *or, rather, in other words, that is to say, i.e.*:

- (1) Critical discourse analysis then is not a simple discipline or narrowly defined theory; it is „not a homogenous method, nor school or a paradigm, but at most a shared perspective on doing linguistic, semiotic or discourse analysis””(Van Dijk, 1993, p.131).  
(P.2/AL/JO/S.2.3/Pr.2/L.646-649/Pg.47)

In example (1), two clauses are used in one citation and joined paratactically by the semi-colon (;). The second clause expands the first clause by means of *Exposition*. In other words, the second clause exposes the first clause through restating its content. In *Exemplification* as another subtype of *Elaboration*, the secondary clause develops the primary clause’s message through becoming more specific about it or strengthening it with an example using *for example, for instance, in particular*”, and *e.g.*:

- (2) *Of particular interest is the relationship between the CEO and IT director, specifically whether or not the CEO is supportive of the IT*

*director and IT initiatives (Feeny et al., 1992). (P.17/IT/JO/S.2.7.2/Pr.3/L.777-780/Pg.62)*

In example (2), the second clause is used to expand the first clause by means of *Exemplification*. That is to say, the second clause is used as an example to reinforce the content of the first clause and restate it. In *Clarification* as a third subtype of *Elaboration*, the secondary clause clarifies the content of the primary clause by some explanatory comments. The punctuations (:), (;), (-) or expressions, such as *in fact*, *actually*, *indeed*, *at least*, *e.g.*, *viz*, are used to introduce the secondary clause.

- (3) *Sarafrazi and Pour (2013) apply their approach only on a binary class classification problem; they did not test multi class classification problems. (P.8/IT/IR/S.2.2.3/Pr.3/L.1052-1054/Pg.63)*

In example (3), the secondary clause starting with they did not..” elaborates on the meaning of the primary clause by providing more explanation and clarification.

In the hypotactic relationship, *Elaboration* results in employing non-defining relative clauses as finite or non-finite clauses to function as a descriptive gloss to the primary clause. These non-defining relative clauses can define the whole clause or any of its constituents, as in example (4).

- (4) *Still on this, Fitzgerald and Kiel (2001) blended the IDT into other models, which makes the model broader. (P.20/IT/JO/S.2.2.1/Pr.78/L.761-762/Pg.63)*

In example (4), a clause complex is structured to realize *Expansion*. The function of the finite dependent clause starting with which” is to define the entire primary clause preceding it. Finite clauses that define the primary clause also include „*that*, *who*, and *whose*” whose domain is a nominal group, as in example (5).

- (5) *Indeed, Chomsky’s theory has been criticized for decades by researchers such as Hudson (1980, p.6) who referred to this*

idealism as „imaginary world“ (P.1/AL/IR/S.2.3.1/Pr.4/L.89-90/Pg.34).

However, when the non-defining relative clause is used without a punctuation, they become a defining relative clause within a simplex clause rather than a complex one, as in example (6).

- (6) *It is given to anyone who uses the computer in his/her work or at home (ICDL US, 2009).* (P.13/IT/JO/S.2.10/Pr.5/L.576-577/Pg.55)

It is worth mentioning here that sometimes it is difficult to determine the defining or non-defining relative clause due to the absence of the punctuation. This was attributed to students' lack of knowledge in using punctuation or following other writers' style who might also rarely use punctuation in their writings. Thus, students' unfamiliarity with punctuation resulted in relative clauses which were difficult to classify as defining or non-defining relative clauses. Clause complexes are also used with the non-defining relative clauses that contained *when* or *where* with a domain expressing time or place, as in examples (7) and (8).

- (7) *He received a Bachelor of Arts degree from Columbia University in New York City, **where** he also studied political science (Wang, 2010; Weatherson, 2011).* (P.12/AL/IR/S.2.8/Pr.43/L.476-478/Pg.43)
- (8) *This restriction changed at the First International Conference on Computers and Communication 1972, **when** scientists demonstrated the system in operation by linking computers together from 40 different locations (Griffiths, 2001).* (P.10/AL/JO/S.2.2.2/Pr.3/L.53-55/Pg.28)

In the following discussion, the second type of *Expansion* is presented.

#### 4.2.3.1.2 Extension

In *Extension*, the secondary clause extends the meaning of the primary clause through adding something new to it. This is achieved paratactically in the form of

coordination by using and, but as in examples (1) and (2) below or hypotactically through using *while* in example (3) and *whereas* in example (4).

- (1) *NIST reviewed the results of this preliminary research **and** selected MARS, RC6TM, Rijndael, Serpent and Twofish as finalists (Nechvatal, Barker, Bassham, Burr, & Dworkin, 2000; Ali, 2009). (P.9/IT/IR/S.2.3.2/Pr.10/L.555-558/Pg.42)*
- (2) *The sampling of two (Abu Shawish & Atea, 2010; Al-Sawalha & Chow, 2012) studies consisted of both gender, **but** Salem's study involoved only male students. (P.3/AL/JO/S.2.3.3/Pr.8/L.372/Pg.37)*

At the hypotactic level, the extending clause in the form of a dependent clause can also involve addition, replacement or alternation. This dependent clause can be finite or non-finite. Finite dependent clauses of addition at the hypotactic level include *whereas* and *while* as introductory conjunctions, as in example (3).

- (3) ***While** it is usually close to impossible to eliminate all the risks in a constituency, the main goal is to reduce the risk exposure to an acceptable level [8, 87]. (P.16/IT/YE/S.2.4.3/Pr.1/L.320-322/Pg.31)*

However, when *whereas*, *while*, and *except that* follow the primary clause, a paratactic relationship rather than a hypotactic one is realized, as in examples (4) and (5).

- (4) *Examples of a Feistel cipher include DES (National Institute of Standard and Technology or NIST, 1999) and BA (Schneier, 1994), **whereas** an example of an SPN cipher is AES (Daemen & Rijmen, 2002). (P. 18/IT/IR/S.2.1/Pr.4/L.31-33/Pg.12)*
- (5) *In addition, Daly and Wilson's (1983) study has also stressed on self-concept, and oral communication apprehension, **while** Onwuegbuzie (1998) concentrates on the relationship between writing apprehension and learning styles. (P.3/AL/JO/S.2.6/Pr.3/L.1373-1376/Pg.84)*

Hypotactically, imperfective non-finite clauses are also used in extension, as in example (6) below.

- (6) After analysing their communicative purposes, Yates and Orlikowski (1992) identified business letters, business memos, and business email messages as genres. (P.2/AL/JO/S.2.2.3/Pr.7/L.503-505/Pg.40-41)

Using *Extension* with a higher percentage in two different fields, AL and IT, may reveal the shared perceptions of EFL Arab postgraduates who have a similar social, cultural and educational background. In other words, the dominance of the *Extension* as a subcategory of *Expansion* indicates the tendency of EFL Arab postgraduates to cite information from other sources as much as possible and integrate it into their writing of the literature review chapter in order to show to the reader, the supervisor and the examiners, their familiarity with their research study. Another possible reason for the high use of the *Extension* is that EFL Arab postgraduates lack knowledge in using other *Expansion*'s subcategories. Therefore, they depended heavily on one subcategory that is represented by *Extension*. The Arabic language may also have influences represented mainly by having similar conjunctions with English such as 'after, while, whereas,...'

In the following discussion, *Enhancement* is introduced as a third type of *Expansion*.

#### **4.2.3.1.3 Enhancement**

Similar to *Elaboration* and *Extension*, in *Enhancement*, two clauses are involved: a primary clause and a secondary one. The meaning of the primary clause is enhanced through the secondary clause by referring to time, place, manner, cause or conditions. Example (1) demonstrates the causal condition using 'because' in the secondary clause.

- (1) There is no specific definition of distance learning (Arafeh, 2004; Elena, 2006) because it is a mixture of many sciences such as

education, business, psychology, information technology, and information technology. (P. 13/IT/JO/S.2.2/Pr.1/L.95-97/Pg.29)

Two clauses are involved in the citation of example (1) which realize Expansion as a logico-semantic relationship. Under Expansion, Enhancement is used by means of effect/cause clauses. Similarly, in example (2) below, two clauses are used in cause-effect relation, in which the second clause starting with *so that...* enhances the first clause.

- (2) *It also makes teachers aware of the underlying beliefs and assumptions about learning and teaching so that they can understand why they do what they do and what might need to change (McLean, 2007). (P.5/AL/YE/S.2.2.4/Pr.3/L.202-205/Pg.40)*

In summary, the relationship between clauses of the clause complex of the citations was realized through *Expansion*, which is subcategorized into other three categories including *Elaboration*, *Extension*, and *Enhancement*. This finding provides a more comprehensive demonstration of the citations with clause complexes rather than limiting the description to non-reporting citations only. Using *Expansion* with a higher percentage revealed the tendency of the EFL Arab students in both fields, particularly in IT, to use material processes and relational intensive processes in the primary clauses of the clause complex more than the verbal and mental processes. The intra-disciplinary percentage of *Expansion* revealed the effect of the *field* as a register variable in using citations with clause complexes, whereby participants in this field (IT) depended more on material processes, such as *study*, *employ*, *use*, and *examine*. These types of processes reflect the real world which serve in supporting more evidence to fields like IT that is based on facts rather argument.

After presenting the findings related to *Expansion* as one aspect of the logico-semantic relationships between clauses of the clause complexes in each citation,

*Projection* is presented in the following section as another aspect of the logico-semantic relationships.

#### 4.2.3.2 Projection

In *Projection*, two clauses are involved; one clause is projecting, whereas the other one is projected. The projecting clause involves either verbal processes, such as *say*, *suggest*, *argue*, *claim*, *state*, *mention*, *indicate* or mental processes, such as *believe*, *think*, *maintain*, and *consider*. For the projected clause, it involves any type of processes. Examples (1) and (2) demonstrate using the verbal process *‘stated’* in the projecting clause of example (1) and the mental process *‘believe’* in example (2).

- (1) *In addition, **they stated** that different RTO parameters in different mobility rates had yielded various TCP performance results.*  
(P.7/IT/SY/S.2.3.1.1/Pr.17/L.553-554/Pg.45)
- (2) ***Horwitz et al. (1986) believe** that communication apprehension plays the most important role.....*  
(P.19/AL/YE/S.2.12.4.1/Pr.1/L.1183-1184/Pg.68)

In example (1), two clauses are involved in one citation. The projecting clause includes the verbal process *‘stated’* that is situated first, and is followed by the projected clause including the process *‘yielded’*. Similarly, the citation in example (2) is a clause complex; it consists of two clauses: the projecting clause and the projected one. The projecting clause involves the mental process *‘believe’*, whereas the projected clause has the material process *‘plays’*. These clause complexes represent *Projection* as a logico-semantic relationship between the two clauses of the clause complex used in citations.

EFL Arab postgraduates used 627 citations with clause complexes to realize *Projection* as a logico-semantic relationship. On the one hand, the literature review

chapters of AL theses include 465 citations with *Projection*, whereas the literature review chapters of IT have only 162 citations with *Projection*, as in Table 4.24.

Table 4.24

*Projection in the Literature Review of AL and IT Theses*

Discipline	Citations with Projection	Intra-Disciplinary Projection	Inter-Disciplinary Projection
AL	465	17.44%	74.17%
IT	162	10.16%	25.83%

Compared with the low number of *Projection* used in the literature review chapter of IT, the high number of using *Projection* in the literature review chapter of AL reflects that EFL PhD Arab postgraduates in this soft domain of knowledge depended more on reporting ideas or quoting speech in using citations. This reflects the disciplinary influence, represented by field, on using the logico-semantic relationships in citations.

However, citations with clause complexes that realize *Projection* were the least used type of logico-semantics in both, AL and IT. This finding may support the effect of EFL Arab postgraduates' perceptions in citations. Based on the findings obtained from the present study, *Projection* as a logico-semantic relationship is found to have several subtypes, demonstrated in Table 4.25.

Table 4.25

*Subcategories of Projection in Citations of AL and IT Theses*

Discipline	Quoting	Reporting	Quoting/ Reporting	Suggestion	Free Indirect Speech	Facts
AL	99 21.29%	38 8.17%	244 52.47%	43 9.24%	28 6.2%	13 2.79%
IT	5 3.8%	20 12.34%	104 64.19%	20 12.34%	9 5.5%	4 2.4%

The most distinguished aspect in using these subcategories of *Projection* is the similarity in using Reporting/Quoting with a higher percentage in the literature review chapter of AL and IT. EFL Arab postgraduates share similar educational, cultural, and social backgrounds, and these may form similar perceptions that EFL Arab postgraduates follow in academic writing. Another possible reason for the high use of Reporting/Quoting as a subcategory of Projection is EFL Arab postgraduates' insufficient knowledge in using *\_verbal'* and *\_mental'* processes appropriately. In other words, verbal and mental processes could be probably used randomly in Quoting/Reporting.

EFL PhD Arab postgraduates' unfamiliarity with the appropriate usage of verbal and mental processes in Projection resulted in employing these two types of processes in Reporting/Quoting. Although the number of citations with clause complexes in IT is lower than AL, EFL Arab postgraduates in the literature review chapter of IT depended heavily on Reporting/Quoting. The intra-disciplinary comparison shows that 64.19% of Projection is used in Quoting/Reporting in the citation of IT compared with 52.47% in the citations of AL. This comparison demonstrates the influence of discipline (field) on using Reporting/Quoting as a subcategory of Projection that realizes the logic-semantic relations between clauses of citations with clause complexes. In addition, students in IT may be unaware of how to use the verbal and mental processes. As a result, they use them interchangeably in Reporting/Quoting. Another distinguished aspect between AL and IT is using the projected clause in the form of a quotation. 21.29% of Projection is used as Quoting in AL, whereas only 3.8% is used in IT. This illustrates clearly the disciplinary influence on using Quoting as a subtype of Projection. This could reveal the attempt

of EFL Arab postgraduates in AL to show the importance and the strength of their arguments by quoting directly what other expert writers in the field have said, suggested or reported. On the other hand, IT is a hard domain that focuses more on facts and methodological procedures rather than arguments. Hence, quotation is less used.

#### 4.2.3.2.1 Quoting ‘Direct Speech’

Quoting Direct Speech is achieved by means of two clauses: the projecting clause and the projected one. The projecting clause includes a verbal process, whereas the projected clause represents what is being quoted, and it includes any process, as in example (1).

- (1) *Haraism (1993, p. 15) mentioned that: “human communication has become the major use of computer networks..” (P. 10/AL/JO/S.2.2.4/Pr.1/L.119-121/Pg.32)*

In example (1), the citation has a clause complex with two clauses. The projecting clause includes the verbal process *mentioned*, whereas the projected clause involves the process *become*. The projected clause is quoted directly. Therefore, it is marked by double commas (‘’) and/or written in italics.

The total structure that rules the projecting and the projected clauses with its Quoting type is a paratactic clause complex. However, EFL Arab postgraduates used Quoting ‘Direct Speech’ inappropriately because of using *that* with the projecting clause to introduce the projected one. Therefore, it is more appropriate to omit *that* in such a type of projection to become as follows:

- (2) *Haraism (1993, p. 15) mentioned “human communication has become the major use of computer networks...”.<sup>4</sup>*

In Quoting *Direct Speech*, the verbal processes employed in the projecting clause contain *say*, verbs related to statements, such as *tell, point out, report*, verbs related to questions, such as *ask, inquire, demand*. Other verbal processes involved in the projecting clause include *explain* and *continue*. Thus, these verbal processes are used in Quoting Direct Speech regardless of the type of citation whether it is integral or non-integral except for one difference. In the integral citation, the cited author can be the *Sayer* of the projecting clause with verbal processes, whereas in the non-integral citation, some nominal constituents such as *„the author, the researchers, research, literature“* are used as the *Sayer*. Unlike the verbal processes in the integral citations, the majority of verbal processes used in non-integral citations are not used in Quoting Direct Speech; rather they were used in Reporting *Indirect Speech* as another type of *Projection*.

- (3) *Researchers argued that reflective practice has no universal definition,.....(Akbari, 2007; Farrell, 2007, 2008; Gimenez, 1999; York-Barr et al., 2006). (P.5/AL/YE/S.2.2.1/Pr.1/L.84-86/Pg.34)*
- (4) *The literature on the importance and effects of presenting politics to the public through LNTSs indicates that several studies have been carried out in the fields of politics and media (Baum, 2003, 2008; Baum & Jamison, 2006; Gomez, 2005; Jones, 2010; Moy & Pfau, 2000; Pfau & Eveland, 1996; Prior, 2003; Weaver & Drew, 2001; Young, 2004, 2008). (P. 12/AL/IR/S.2.3/Pr.4/L.136-140/Pg.28-29)*

In each of the examples (3) and (4), clause complexes are used with *Projection*. Each clause consists of two clauses. The projecting clauses include the verbal processes *argued* in example (3) and *indicate* in example (4). In each of these two examples, the non-integral citation is used. Therefore, *researchers* in example (3) and *the literature* in example (4) function as the *Sayer* in the projecting clauses.

<sup>4</sup> This was used as an example to show how Quoting should be used.

However, *Projection* included inappropriate use represented by separating between the projecting clause and the projected one with the punctuation (.). The other inappropriate use in *Projection* was using that with the projecting clause in Quoting Direct Speech. In such a type of *Projection*, the relationship between the projecting clause and the projected one is paratactic rather than hypotactic, and each clause, the projecting and the projected clause, can stand alone as independent clauses. Consequently, it is inappropriate to use that with Quoting Direct Speech, as in example (5).

- (5) *French and Raven (1959) point out that, "the strength of coercive power depends on the magnitude of the negative valence of the threatened punishment....." (p.157). (P.12/AL/IR/S.2.16/Pr.3/L.1286-1288/Pg.80)*

Thus, it is more appropriate to delete both that and the comma (,) to make the citation as in example (6).

- (6) *French and Raven (1959) point out "the strength of coercive power depends on the magnitude of the negative valence of the threatened punishment....."*

Another inappropriate use of *Projection* by EFL Arab postgraduates was using verbal processes in Reporting Indirect Speech rather than Quoting Direct Speech. It is more appropriate to use verbal processes to Quote Direct Speech rather than to Report Indirect Speech. In example (7) below, the verbal process points out is used inappropriately in Reporting Indirect Speech.

- (7) *He points out that although such assertion of the writer's conviction can be seen as leaving little room for the reader's own interpretations,..... (P.4/AL/YE/S.2.2.2/Pr.2/L.97-100/Pg.42-43)*

Consequently, instead of using the verbal process point out with reporting, it is more appropriate to use it with Quoting Direct Speech without using that to become as follows.

(8) *He points out „“although .....interpersonal solidarity””.*

EFL Arab postgraduates' inappropriate use of Quoting Direct Speech, such as using that with the projecting clause, using punctuation after the projecting clause, and using verbal processes for reporting rather than quoting, may reveal that EFL Arab postgraduates lack sufficient knowledge in using projection properly.

#### 4.2.3.2.2 Reporting 'Indirect Speech'

Similar to Quoting Direct Speech, Reporting Indirect Speech involves two clauses: the projecting clause and the projected one. In such a type of Projection, language is used to report thoughts through using mental processes of cognition in the projecting clause, whereas the projected clause is a meaning that includes any type of processes. The basic pattern for projecting meanings is hypotactic. This signifies that the projected clause depends on the projecting clause that includes a mental process, as in examples (1) and (2) below.

- (1) *Herring (2000) believes that both men and women transfer the already-present gender differences of face-to-face communication..... (P. 10/JO/AL/S.2.3.2.1/Pr.2/L.677-679/Pg.57)*
- (2) *He feels that developers should utilize check-lists and guidelines in their design phases.(P.20/IT/JO/S.2.2.3/Pr.12/L.1250-1251/Pg.90)*

The citation in example (1) is a clause complex. In the projecting clause, the mental process *believe* is used, whereas the projected clause includes the material process *transfer*. The clause complex in example (1) is used to Report Indirect Speech through the mental process *believes*. Similarly, the citation in example (2) consists of two clauses. The projecting clause includes the mental process *feels*, whereas the material process *utilize* is employed in the projected clause.

In spite of its hard domain, the literature review chapter of IT has Reporting Indirect Speech in the second rank in terms of percentage. This may demonstrate unawareness of EFL Arab postgraduates in IT of the implied evaluation in using mental processes. On the other hand, Reporting Indirect Speech occupies the fourth rank in terms of percentage in the literature review chapter of AL.

#### 4.2.3.2.3 Reporting Speech, Quoting Thoughts

Verbal processes, which were used in Quoting Direct Speech and presenting it as wordings, were also used in reporting a saying and presenting it as a meaning. Thus, it is called ‘\_Reported Speech’ or ‘\_Indirect Speech’. Similar to Quoting Direct Speech and Reporting Indirect Speech, the clause complex in this type of *Projection* consists of two clauses: the projecting clause and the projected one, joined hypotactically, as in example (1) below.

- (1) However, she pointed out that a distinction between computer-mediated discourse (CMD) and CMC should be made clear. (P. 10/AL/JO/S.2.2.1/Pr.2/L.20-21/Pg.27)

Some verbal processes are used only in Reporting rather than Quoting including ‘\_hypothesize’ and ‘\_claim’, and these are used appropriately by some EFL Arab postgraduates as in examples (2) and (3).

- (2) Similarly, Hughey et al., (1983) claim that writing is a skill developed during the lifetime of the person..... (P.3/AL/JO/S.2.1/Pr.3/L.16-18/Pg.20)
- (3) Krashen's Monitor Model hypothesizes that linguistic competence can be achieved by means of natural language acquisition..... (P.6/AL/IR/S.2.1/Pr.2/L.22-24/Pg.23)

However, some of the verbal processes were used inappropriately; they were used in Quoting and this is considered inappropriate usage. It is more appropriate to use these verbal processes in Reporting Speech only rather than Quoting. In examples (4)

and (5), citations are used inappropriately because the verbal processes „*hypothesized*” and *claim*’ are used in the projecting clause to Quote Direct Speech.

- (4) *He hypothesized that “the majority of the misunderstandings in CMC are associated with misinterpretation of messages.....”* (p. 208). (P.2/AL/JO/S.2.4.1/Pr.7/L.1147-1149/Pg.70)
- (5) *Additionally, Kroll (1979) claims that “positive attitudes lead to more writing,.....”* (p. 6). (P. 3/AL/JO/S.2.6.5/Pr.2/L.1434-1436/Pg.91)

It was mentioned that mental processes when used in projection, they were used in Reporting rather than Quoting. However, for the mental processes „*think*’ and „*reflect*’, it is appropriate to use them in Quoting Direct Speech. Thus, instead of a hypotactic relationship between the projecting clause and the projected one, a paratactic relationship is used. The mental process *thought*’ in example (6) is used appropriately by some EFL Arab postgraduates.

- (6) *For example, Kojak (1983, p. 39) thought that “men approach the more prestigious classical variety of Arabic.....”*. (P. 1/AL/IR/S.2.7.1/Pr.9/L.536-538/Pg.55)

However, using *that*’ in example (6) is inappropriate. In Quoting, a paratactic rather than a hypotactic relationship is used, hence *that*’ should be omitted. Another inappropriate use is using the mental process *believe*” in Quoting Direct Speech rather than Reporting as in example (7) below.

- (7) *Bayram (2010) believes that, “politics is a struggle for power.....”* (p.24). (P. 12/AL/IR/S.2.15/Pr.1/L.1116-1118/Pg.72)

Other inappropriate usages of *Projection* included using material processes to either report or quote. Some material processes were used inappropriately; they were used in the projecting clause to realize projection as a logico-semantic relationship in the clause complex. Projecting clauses are limited only to two processes which are verbal and mental. The examples (8) and (9) clarify how the material processes are used inappropriately in the projecting clauses.

- (8) Licklider and Vezza (1978) wrote that it soon became obvious that the ARPANET (the Internet today) was becoming a human-communication medium with very important advantages over normal U.S. mail and over telephone calls. (P.2/AL/JO/S.2.4/Pr.3/L.1065-1068/Pg.66)
- (9) Furthermore, Pearson, Bahmanziari, Crosby & Conrad (2003) has empirically documented that culture has less influence on CSE. (P.20/IT/JO/S.2.2.1/Pr.46/L.907-908/Pg.71)

In examples (8) and (9), the citations include clause complexes that realize *Projection*. However, this projection is used inappropriately due to using the material processes *wrote* in example (8), and *documented* in example (9) as projecting processes. Thus, EFL Arab postgraduates' lack of sufficient information on using processes in clause complexes resulted in inappropriate use, such as using mental processes for Quoting, using verbal processes for Reporting and using material processes for Reporting. Such unawareness of using Projection has resulted in a high use of the Reporting/Quoting in the literature review chapters of AL and IT theses.

#### 4.2.3.2.4 Projecting Suggestions

*Projection* is also used in suggestions through verbal processes, such as *suggest*, *recommend*, *agree*, and *propose*, as in example (1) below.

- (1) Similarly, Faerch and Kasper's (1983) taxonomy suggests that the speakers who face a communication problem have two options..... (P.19/AL/YE/S.2.5.4.3/Pr.3/L.416-419/Pg.24)

In example (1), the citation is a clause complex which consists of two clauses. The verbal process *suggest* is used to project a suggestion, and is followed by a projected clause. Projecting suggestions involves using non-finite clauses, such as the imperfective clause in example (2) or the perfective clause in example (3) below.

- (2) Liesching (1979) suggests having a film whose pace of delivery is slower..... (P.6/AL/IR/S.2.5/Pr.6/L.285-286/Pg.34)

- (3) As a future work, the authors suggest to examine higher order regression parameters. (P.8/IT/IR/S.2.1/Pr.15/L.187-188/Pg.22)

Examples (2) and (3) are citations of clause complexes, in which the projecting clauses include the verbal process *suggest* to project a suggestion.

Projecting suggestions has the second rank of percentage in the literature review chapter of IT. On the other hand, in the literature review chapter of AL, it occupies the third rank. This finding may illustrate the dependence of EFL PhD Arab postgraduates in IT on verbal processes, such as *suggest*, *propose*, and *recommend* in order to create a gap, indicate the problem in the previous studies and justify conducting their research studies.

#### 4.2.3.2.5 Free Indirect Speech

In Free Indirect Speech as another type of *Projection*, the clause complex consists of two clauses. The projected clause is independent, whereas the projecting clause is dependent through using the conjunctive expression *as* as a non-finite clause in example (1) or a finite clause in examples (2) and (3). The projected clause takes the form of Reporting rather than Quoting that is projected verbally or mentally by means of verbal or mental processes.

- (1) As mentioned earlier, Devitt (1991) examined the genre in a tax accounting community. (P.2/AL/JO/S.2.3.1/Pr.4/L.731-732/Pg.51)
- (2) As Markkanen and Schroder (2006) point out, there is no clear-cut list of hedges..... (P.4/AL/YE/S.2.4.1/Pr.1/L.207-209/Pg.48)
- (3) Such differences, as the writers suggest, result from a female concern with relationships and a male concern with systems and analysis. (P.4/AL/YE/S.2.5.2/Pr.4/L.573-575/Pg.65)

The position of the projecting clause may come first as in examples (1) and (2), and it may mediate the projected clause, as in example (3).

#### 4.2.3.2.6 Facts

*Facts* can be also revealed through *Projection* that is represented in a ready projected form. In other words, *Facts* are projected impersonally through using impersonal structures involving mental or verbal processes.

- (1) Therefore, it has been noticed that successful application using datasets of large numbers of features, would be difficult to manipulate (Wang, 2012;.....). (P.8/IT/IR/S.2.2.2/Pr.1/L.689-692/Pg.46)

In example (1), *Facts* that are implied in the projected clause are projected impersonally through using impersonal structures, such as *it has been noticed....* "in example (1). Such a type of projection might be effective in the hard domain such as IT since it is based on facts. However, *Facts* as a subtype of projection is rarely used in IT. It is used only (4) times in the literature review chapter of IT and (13) times in the literature review chapter of AL. This may emphasize that EFL Arab postgraduates lack knowledge in using Projections. As a result, they could not employ *Facts* purposefully as an impersonal structure, particularly in their writing of the literature review chapter of IT.

#### 4.2.3.3 Combination of Projection and Expansion

The logico-semantic relationships were not limited only to the two types, which are *Expansion* and *Projection*; rather, they involved a combination of the two types which resulted in another type of logico-semantic relationships. This mixed type of the logico-semantic relation is characterized by having more than two clauses in each citation. In such a proposed type of logico-semantics, a clause with a material verb is used, then it is followed by two clauses realizing *Projection*. The function of these two latter clauses is to expand the first clause with the material process. In other citations, four clauses are used; each two clauses realize *Projection*. Thus, *Extension*,

*Elaboration*, or *Enhancement* are used with any subcategory of *Projection* in a citation with more than two clauses. This mixed type of logico-semantics has the second percentage, following *Expansion* in the literature review chapter of AL and IT theses, as demonstrated in Table 4.26.

Table 4.26

*Combination of Projection and Expansion in the Literature Review of AL and IT Theses*

Discipline	Citations with Projection and Expansion	Intra-Disciplinary	Inter-Disciplinary
Applied Linguistics	775	29.6%	81.57%
Information Technology	175	17.26%	18.43%

Table 4.26 demonstrates that EFL Arab postgraduates are similar in using a combination of Projection and Expansion with a high number of frequencies following Expansion regardless of the field whether it belongs to the hard domain or the soft one. The literature review chapters of AL have a higher number of this combination of Projection and Expansion (775) compared with the low number (175) in IT. Using a mixed type of the logico-semantics in one citation shows that EFL Arab postgraduates use long citations with three, four, or five clauses in each citation. The number of clauses in each citation was mentioned in the findings of Objective One (see Section 4.2.1.1, Table 4.3). This can be probably attributed to the effect of L1 which has some similarities with the English language in terms of the relative pronouns. The inter-disciplinary comparison reveals that the field also affects the use of the logico-semantics in terms of having a higher number and percentage of a mixed type (Projection and Expansion) of logico-semantics in the citations of

Applied Linguistics. This can be attributed to having more citations in the literature review chapter of AL as a field of the soft domain.

- (1) As one adolescent reported: "If you don't use the technology, you are not part of the group", and he also said that: "If you are not a name or a number in my phone book, then you're not on my radar screen" (Grinter & Eldridge, 2001)(P.10/AL/JO/S.2.4.1.1/Pr.4/L.1174-1176/Pg.81)
- (2) He suggested that the practice of poets on this point is extremely useful for learning simple tense, and added that the distinctions between the English simple present and progressive forms have long intrigued and perplexed students of the language. (P.6/AL/IR/S.2.8.2/Pr.1/L.518-521/Pg.46)
- (3) For example, Jones and van Rijsbergen (1976) showed that 250 queries are usually acceptable while Leung suggests that 20 queries are enough (Leung & Ip, 2000). (P.18/IT/IR/S.2.1.6/Pr.12/L.337-339/Pg.34-35)

In examples (1), (2), and (3), each citation includes four clauses; each two clauses realize *Projection* as a logico-semantic relationship. This *Projection* is expanded by another *Projection* by means of *Extension* using the conjunctive expressions *and* in examples (1) and (2), and *while* in example (3). In another example, the projecting clause is used to project two projected clauses; one projected clause follows the projecting clause directly, whereas the second projected clause follows the first projected clause and is extended through the conjunctive expression *and*, as in example (4).

- (4) Since then, experts in the teacher education and staff development realized that teaching is complex and that teachers' professional knowledge can be developed and constructed.....(Brookfield, 1995; ....). (P.5/YE/AL/S.2.1/Pr.2/L.13-17/Pg.31)

The citations in examples (1), (2), (3), and (4) represent a mixed type of logico-semantics that is realized through *Projection* and *Expansion* in one citation. In example (5), the citation consists of *Projection* that is followed by another clause that clarifies the *Projection* and takes the role of *Elaboration*. Hence, such a mixed type of *Projection* and *Expansion* can be called *Expanded „Elaborated“ Projection*. The

punctuation (;) is used to separate between the *Projection* clause complex and the elaborating clause.

- (5) *In A Course in General Linguistics (1974 [1916]), Saussure explained that language is a dual activity on many levels; it is a combination of articulation and perception; sound and meaning; individual and social; present and past (1974, pp. 8-9). (P.1/AL/IR/S.2.3.1/Pr.1/L.41-43/Pg.32)*

In example (5), there are three clauses; the first two clauses realize *Projection* that is followed by another simplex clause. The punctuation (;) is used to separate between *Projection* and the simplex clause that plays the role of *Elaboration* by restating the content of *Projection*.

*Enhancement* as a type of *Expansion* that expresses cause and spatial time is also combined with *Projection* through following the clause complex of *Projection*, thus forming what can be called *Expanded „Enhanced“ Projection*.

- (6) *Most importantly, even political analysts do believe that the role of the talk shows is crucial in politics since political events, now, are closely associated with what is being said, presented and performed by the politicians interviewed in these Shows (Fernando,2003). (P.12/IR/AL/S.2.3/Pr.4/L.125-128/Pg.28)*

Using *Expanded Projection* implies that EFL Arab postgraduates prefer using more than two clauses in each citation. This can be attributed to the effect of L1 as their native language. In addition, using relative pronouns, such as *that*, *which*, *who* and using the conjunctions *also*, *when*, and *while* was the other main reason for using citations with more than two clauses in each citation.

In another subtype of *Projection*, three clauses are used in one citation. The projecting clause includes a verbal process or a mental process, followed by the projected clause which also involves a verbal process or a mental process. This

projected clause in its turn functions as another projecting clause and is followed by another projected clause.

- (7) *In addition, the continuous appearances of the presidential candidates suggest that they do believe that their appearances in these television talk shows are politically influential* (Baum, 2003; Baum & Jamison, 2010). (P. 12/AL/IR/S.2.3/Pr.4/L.129-132/Pg.28)
- (8) *Latif (2007) concludes that the outcome of the following studies showed that L2/FL writing apprehension is correlated with foreign language classroom anxiety.....* (P.3/AL/JO/S.2.6.8/Pr.2/L.1482-1488/Pg.94)

In each of the examples (7) and (8), three clauses are used. In example (7), the first projecting clause has the verbal process *suggest* that is followed by a projected clause with the mental process *believe*. This projected clause functions as another projecting clause that is followed by another projected clause. The citation in example (8) is also similar to example (7). In summary, the mixed type of *Projection* and *Expansion* in one citation with its diverse subtypes was another way of structuring clauses to realize the logico- semantic relationships of clause complexes in citations.

#### 4.2.3.4 Summary of Objective Two: Part Two (Logical Meanings)

*Projection* depends mainly on two types of processes which are *Verbal* and *Mental*. These are used in the primary clause as the projecting clause that is followed by a secondary clause involving any type of processes. On the other hand, *Expansion* depends on using material, relational, behavioural or existential processes in the primary clause. A third type of logico-semantic relations was found which is composed of a combination of *Projection* and *Expansion* in one citation. These subtypes provide a clear description of the relationships that govern clause complexes in the citations rather than limiting the description of such citations to reporting or non-reporting citations.

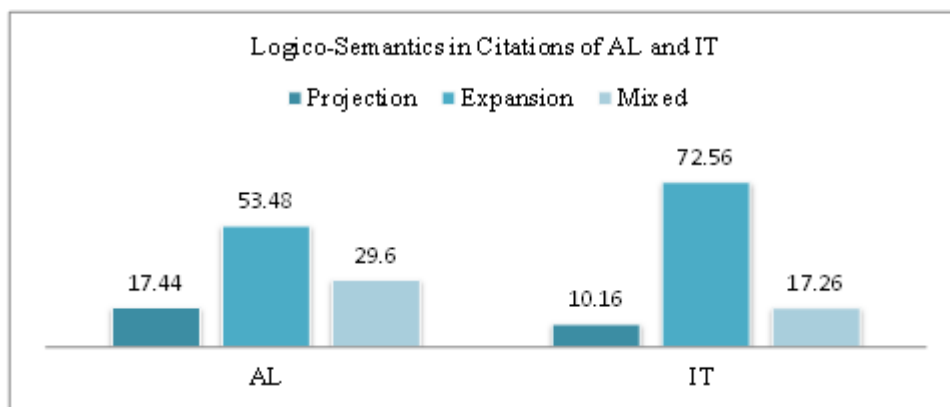


Figure 4.15. Logico-semantics in the literature review of AL and IT theses

Figure 4.15 shows that three main types of logico-semantics are used in the citations with clause complexes in the literature review chapter of AL and IT theses. These logico-semantics include *Expansion*, *Projection*, and a mixed type of *Expansion* and *Projection*. The register variable, field, and the shared perceptions of EFL Arab postgraduates in writing may have an influence on the use of the logico-semantic relations. This is evidently clear in using *Expansion* with a higher percentage in two different fields. Such a finding has several implications. First, it indicates the dependence of EFL Arab postgraduates on using material processes more than the other materials and this finding was confirmed in Figure 4.13 of Objective Two. It also implies the effect of the Arabic Language on the overuse of structural conjunctions in citations with clauses complexes.

#### 4.2.4 RQ 1: Objective Three (Textual Meanings)

As was discussed in Objectives One and Two, when analysing the clause in the citations, three different kinds of meanings are combined simultaneously. Two meanings were obtained and discussed in Objective One and Objective Two. Hence, in this section, the findings are concerned with identifying how the textual meanings

are expressed in the clauses of the citations in the literature review chapters of AL and IT theses. The clause is the main unit of analysis when identifying its textual meanings. The clause is characterized with a message that is known as the THEMATIC structure. The way the clause is organized gives it a communicative message. The message can be communicated in different ways through assigning a significant role to one part of the clause that is known as the *THEME*. This *THEME* is combined with the other part of the clause named *Rheme* in order to make the message of the clause.

*THEME* is defined as the point of departure of the message, which the clause is concerned with. *THEME* is what the clause is going to be about which always comes first, whereas *Rheme* is the reminder part of the clause. Thus, the message of the clause is realized through the structure of the *THEME* and the *Rheme*. Example (1) below demonstrates the two parts of the clause.

(1)

Argamon <i>et al.</i> (2005)	analysed the texts of the applied science, arts, commerce, and leisure.
<b>THEME</b>	<b>Rheme</b>

(P.4/AL/YE/S.2.5.2/Pr.4/L.571-572/Pg.65)

In example (1), the ‘*Actor*’ that is represented by the name/s of the cited author ‘*Argamon et al. (2005)*’ functions as the *THEME*. The *THEME* is positioned first in the clause, whereas the reminder of the clause functions as the *Rheme*. A significant aspect when discussing the *THEME* and the *Rheme* of the clause is choosing a constituent to function as the *THEME*. For example, the citations in example (2) and (3) explain how the *THEME* differs in each clause.

(2) According to Prince *et al.* (1982), sentence (a) has no hedge.

(P.4/AL/YE/S.2.2.1/Pr.5/L.55/Pg.41)

(3) Vassileva (2001) classified boosters into three subcategories.

(P.4/AL/YE/S.2.3/Pr.8/L.176-179/Pg.46)

In example (2), the THEME is represented by the *Circumstantial* constituent According to Prince et al. in which the name of the cited author is a part of it. On the other hand, in example (3), the THEME is represented by the name of the cited author Vassileva as the ACTOR. Thus, the two clauses are different in terms of using different types of THEME.

#### 4.2.4.1 Types of Themes

Although the declarative clauses were dominant in the citations of AL and IT theses, the variety of the textual meanings was evident in using several types of THEME.

##### 4.2.4.1.1 Interpersonal, Topical, and Textual THEME

Identifying the type of the THEME requires analysing the clause at the interpersonal and experiential meanings, as demonstrated in example (1).

(1) *Figure 2.1 illustrates the ECB mode (Dworkin, 2001).*  
(P.9/IT/IR/S.2.1.1.1/Pr.3/L.58/Pg.14)

In example (1), the nominal constituent Figure 2.1 functions as the Subject of the declarative clause under the interpersonal meanings. Hence, it is called the interpersonal THEME. The same constituent is conflated with the functional role under the experiential (Transitivity) meanings. In other words, the nominal constituent Figure 2.1 functions as the Sayer for the process illustrates, thus it is called the Topical THEME.

(2)

<i>Figure 2.1</i>	<i>illustrates</i>		<i>the ECB mode (Dworkin, 2001).</i>
Subject	Finite	Predicator	Complement
MOOD		RESIDUE	
Interpersonal			
SAYER	Verbal		Verbiage
Topical			
THEME	Rheme		

(P.9/IT/IR/S.2.1.1.1/Pr.3/L.58/Pg.14)

Three meanings are involved in the clause simplex in example (2); they include the interpersonal, the experiential and the textual meanings. The interpersonal meaning is represented by the nominal constituent Figure 2.1 which functions as the Subject of the clause. Thus, Figure 2.1 is the interpersonal *THEME*. The same constituent, Figure 2.1 functions as the Sayer of the clause under the experiential meanings (Transitivity system). The functional role of the nominal constituent Figure 2.1 is also called the Topical THEME. Therefore, under the textual meanings, the nominal constituent Figure 2.1 functions as the *THEME* of the clause, whereas the remainder of the clause functions as the Rheme of the clause. The *THEME* is realized in some clauses of the citations through one constituent. In other words, the interpersonal *THEME* and the topical *THEME* are mapped onto the same constituent, as in example (3) below.

- (3) *Nonetheless, the meaning of reflective practice encounters tensions between the two various views of Dewey and Schon.*  
(P.5/AL/YE/S.2.2/Pr.3/L.30-32/Pg.32)

In example (3), the constituent Nonetheless functions as an Adjunct: Conjunction. Under the textual meanings, this Adjunct: Conjunction also has the role of the Textual *THEME*. Hence, in such an example, the clause has three types of *THEMES*: a Textual *THEME*, an Interpersonal *THEME* and a Topical *THEME*. The Interpersonal *THEME* and the Topical *THEME* are conflated with the same nominal constituent the meaning of reflective practice. However, in other declarative clauses, the Interpersonal *THEME* is different from the Topical *THEME* as in example (4) below.

- (4) *Traditionally, teachers perceive their roles as transmitters of knowledge to students* (Harmer, 2001).  
(P.5/AL/YE/S.2.4.4/Pr.1/L.496-497/Pg.53)

In example (4), the constituent Traditionally is an Adjunct: Comment that functions as the Interpersonal *THEME*, whereas the nominal constituent teachers is the

‘Senser’ of the clause that functions as the Topical THEME. Thus, the interpersonal THEME and the topical THEME are assigned to different constituents of the clause. Some of the integral citations involve the name of the cited author as a part of the Textual meanings, as in example (5) below.

- (5) *Shannon (1949) deduced the theoretical principles of confusion and diffusion.* (P.9/IT/IR/S.2.1.2/Pr.1/L.98-99/Pg.16)

In example (5), the name of the cited author ‘Shannon’ is integrated with the structure of the clause. Under the interpersonal meanings, the name of the cited author functions as the ‘Subject’ of the clause. Thus, it functions as the interpersonal THEME. Under the Experiential Meanings (Transitivity System), the name of the cited author also functions as the ‘Senser’ of the clause. Therefore, it is called the ‘Topical THEME’. Consequently, under the Textual meanings, the name of the cited author functions as the ‘THEME’ of the clause. In some clauses of the citations, the name of the cited author is replaced by a pronoun to function as the ‘Topical THEME’ as demonstrated in example (6).

- (6) *Then **he** divided the group into three students and five students.* (P.6/AL/IR/S.2.8.2/Pr.4/L.565/Pg.48)

The name of the cited author in example (6) is replaced by the pronoun ‘he’. This constituent has the function of the ‘Subject’ as the interpersonal THEME and the function of the ‘Actor’ as the topical THEME. Thus, these two themes are mapped onto the same constituent. Hence, the name of the cited author that is represented by a pronoun is the THEME of the clause. On the other hand, in the non-integral citation, the name of the cited author has no role under the Textual Meanings; the name of the cited author is neither a part of the *THEME* nor a part of the *Rheme* of the clause. In example (7) below, there is a demonstration of how the cited author in the non-integral citation does not have a role under the Textual Meanings.

(7) *The quality of features and feature subset size* are often used as the terminating condition in wrapper techniques (Moustakidis & Theoxaris, 2010). (P.8/IT/IR/S.2.2.2/Pr.5/L.723-724/Pg.48)

In example (7), the non-integral citation is used. In such example, the nominal constituent *‘The quality of features and feature subset size’* has the role of the Interpersonal THEME and the Topical THEME at the same time, whereas the reminder of the clause has the role of the Rheme under the Textual Meanings. However, the names of the cited authors are put in parentheses; therefore, no Textual role is assigned to them.

Table 4.27

<i>Textual, Interpersonal and Topical Theme in Citations of AL and IT Theses</i>				
Discipline		Textual THEME	Interpersonal THEME	Topical THEME
Applied	F	554	6022	5961
Linguistics	%	59.25%	65%	64.77%
Information	F	381	3242	3242
Technology	%	40.75%	35%	35.23%
Total		935	9264	9203

Table 4.27 shows that the Textual THEME, the Interpersonal THEME, and the Topical THEME are used with a higher percentage in the citations of the literature review chapter of AL. This can be attributed to the high density of citations in the literature review chapters of AL. The intra-disciplinary comparison shows the dominance of the interpersonal theme in the citations of the AL. This may reveal the attempt of EFL Arab postgraduates in AL to use more Mood Adjuncts and Comment Adjuncts in order to add more details and explanations. On the other hand, students in IT possibly lack vocabulary related to Mood Adjuncts and Comment Adjuncts. This was demonstrated in the findings of Objective One (see Figures 4.3, 4.5, and 4.6). Therefore, the interpersonal THEME is less used. This demonstrates the disciplinary influence on using the Interpersonal Theme.

Regarding the Textual Theme in the citations of IT, its percentage was higher than the Interpersonal Theme and the Topical Theme. This possibly demonstrates two significant issues. First, EFL Arab postgraduates in IT depended heavily on using textual conjunctions. Second, their probable lack of other devices to make their ideas flow smoothly made them overuse textual conjunctions as discourse markers.

#### 4.2.4.1.2 Elliptical THEME

Analysing the Elliptical THEME in a declarative clause depends mainly on identifying the constituent that has been ellipsed. Using clauses with an Elliptical THEME was found mainly in clause complexes, whereby the Interpersonal Theme/Topical Theme was ellipsed.

- (2) *Each site has a degree of autonomy, is capable of executing a local application, and also participates in the execution of a global application [21]. (P.15/IT/PA/S.2.3.1/Pr.4/L.130-132/Pg.18-19)*

Each site	has a degree of autonomy	_____	is capable of executing a local application	and also	_____	participates in the execution of a global application [21].
THEME	Rheme	Elliptical THEME	Rheme	Textual THEME	Elliptical THEME	Rheme

Example (1) is a citation with a clause complex that is composed of three clauses. Each clause is analysed to identify its textual meanings. In the first clause, both parts of the clause are used: THEME and Rheme. On the other hand, in the second clause, only the Rheme is used, whereas the THEME is elliptical. In the third clause of the citation, only the Textual THEME is employed, whereas the topical THEME is elliptical, too.

#### 4.2.4.1.3 Structural THEME

The structural THEME is another type of THEME that was used in clause complexes. The relative pronouns, *who*, *that*, and *which*, are used as a Structural THEME that represents the Topical THEME. In example (1) below, the citation involves two clauses. In the second clause, the relative pronoun *that* is used as the Structural THEME.

(1)

He	also tested for randomness and attacks		that	produced good results
Topical THEME	Rheme		Structural/Topical THEME	Rheme

(P.9/IT/IR/S.2.3.4/Pr.3/L.788-789/Pg.58)

In the second clause, the relative pronoun *that* functions as the Structural/Topical THEME. In example (2) below, two clauses are involved in one citation.

- (2) *They assert that socialization is a complicated way of teaching students the way of writing in a novel language.*  
(P.3/AL/JO/S.2.1/Pr.3/L.26-27/Pg.21)

The textual meaning of such a clause complex is explained below.

They	assert		that	socialisation	<i>is a complicated way of teaching students the way of writing in a novel language</i>
Topical			Structural	Topical	
THEME	Rheme		THEME		Rheme

In example (2), two clauses are involved, in which two THEMES are used in the second clause: *that* as a structural THEME and *socialisation* as a topical THEME. Table 4.28 presents a clear description of the similarities and differences between AL and IT in terms of using the Elliptical Theme and Structural Theme in the clauses of citations.

Table 4.28

*Elliptical Theme and Structural Theme in the Literature Review of AL and IT Theses*

Discipline		Elliptical THEME	Structural THEME	Total Structural Themes
AL	F	2836	732	4050
	%	58.88%	60.90%	65.64%
IT	F	1981	470	2120
	%	41.12%	39.10	34.36%
Total		4817	1202	6170

Compared with IT, the percentage of using the Elliptical Theme and the Structural Theme dominates the citations used in the literature review chapter of AL. This may reveal the association between the density of citations and the percentage of Elliptical and Structural Themes. Another distinguished feature is the overuse of the Elliptical Theme in the citations of AL and IT. Although the number of the citations was higher in the literature review chapter of AL, the percentage of the Elliptical Theme in the clauses of the literature review of IT was closer to that used in the clauses of the literature review of AL. This might reveal the dependence of EFL PhD Arab postgraduates on using citations with clause complexes more than citations with clause simplexes as was shown in the findings of Objective Two, Part Two (see Table 4.21). The high use of total structural Themes could probably shed light on the possible effect of L1 (Arabic Language), particularly in using relative pronouns, such as *that* and *which* which resulted in citations with clause complexes.

#### 4.2.4.2 Predicated THEME

The predicated theme is one of the structural patterns which contribute to the thematic organization of the clause in citations. Each clause in the citations has a unit of information which structures the clause into two components. One part of the clause serves as the new information which the writer wishes to communicate to the

reader as significant information. On the other hand, the other part of the clause functions as the old part that is already known to the reader. The new information is positioned in the second part of the clause to form the Rheme, whereas the familiar information comes first in the clause to constitute the Theme.

- (1) *The study by Leone et al. (1999) is clear example of such studies.*  
(P.20/IT/JO/S.2.2.1/Pr.8/L.78-79/Pg.23)

The study by Leone et al. (1999)	is a clear example of such studies.
Interpersonal Theme	
Topical Theme	
Theme	Rheme

In example (1), the citation is a clause simplex that is declarative, in which the name of the cited author is integrated with the structure of the clause. For the textual meaning, this clause is composed of two parts: THEME and RHEME. The THEME is represented by the nominal constituent in which the names of the cited authors Leone et al. are a part of it. Theme predication is based on the intention of the writer to give importance and emphasis to a constituent that is already known. Thus, the Theme that was unemphasized becomes emphasized by means of the predicated THEME. The predicated Theme is identified based on its association with the structure It is/was.....who..... This is made clear in example (2) below.

- (2) *It is Chomsky's (1965, p. 3) idealized way in approaching language that aims to specify the universal principles which characterize the innate structure of language.* (P.1/AL/IR/S.2.3.1/Pr.2/L.62-64/Pg.33)

In example (2), the predicated Theme structure is used, represented by It is.....that...... In this structure, It is... is employed to predicate the Theme. The name of the cited author which was originally a part of familiar information was presented in this example as a part of new information. Thus, the name of the cited

author is given more emphasis by involving it as a part of the Rheme. Without using the predicated Theme structure, the name of the cited author would be a part of the Theme; that is, a familiar or an expected type of information.

It	is Chomsky's (1965, p.3) idealised way in approaching language	that	aims...	
topical		topical		
THEME	RHEME	THEME	RHEME	
THEME		RHEME		

In such a use, the topical THEME *It* represents the point of departure for the message, whereas *is Chomsky's (1965, p.3) idealised way in approaching language* signals the new information that is called Rheme.

Table 4.29

*Predicated Theme in the Literature Review of AL and IT Theses*

Discipline	Predicated THEME	
Applied	F	16
Linguistics	%	80%
Information	F	4
Technology	%	20%
Total		20

The number and percentage of the Predicated Theme that is used in the clauses of the literature review chapter of AL and IT are low. Lack of use such a structure may reveal that EFL Arab postgraduates, particularly students in IT, have unfamiliarity or low knowledge of such expressions. However, the Predicated Theme is higher in the clauses of citations of AL. EFL Arab postgraduates could intentionally emphasize some constituents in order to highlight the name of the author or an important concept.

#### 4.2.4.3 Marked THEME

The difference between the marked and unmarked THEME implies distinguishing between the ‘atypical and unusual’ and the most ‘typical’ and ‘usual’. In other words, the marked THEME signifies unusual THEME, whereas the unmarked THEME reveals a typical type of THEME. One of the distinguished aspects of the marked THEME is to employ generic classes to function as THEME without being the ‘Subject’ or the ‘Actor’ constituents of the clause. Markedness also allows nominalisation to become Thematic. An example of Marked THEME is demonstrated in example (1) below.

- (1) *For comparative studies, the focus was on the frequency use of hedges and boosters employed in NS and NNS written texts (Hyland & Milton, 1997; Nikula, 1997; Hinkel, 2005). (P.4/AL/YE/S.2.4.3/Pr.18/L.478-480/Pg.61)*

For comparative studies	the focus was on the frequency use of hedges and boosters employed in NS and NNS written texts (Hyland & Milton, 1997; Nikula, 1997; Hinkel, 2005).
Adjunct: Circumstantial	
Residue..	
Circumstantial: Manner	
topical	
THEME	RHEME

In example (1), the prepositional constituent ‘*For comparative studies*’ functions as the Marked THEME in the declarative clause of the citation.

- (2) *In the information systems literatures, users’ intention to use an information system is influenced by three factors: (1) individual factor, (2) implementation environment factor, and (3) technology factor (Chau & Hu, 2002; Dadayan & Ferro, 2005; Nanayakkara, 2005). (P.13/IT/JO/S.2.0/Pr.4/L.32-35/Pg.25)*

Similarly, in example (2), the citation has a clause with a Marked THEME since the prepositional constituent ‘*In the information systems literatures*’ functions as the Circumstantial: Location. Hence, it is a topical THEME.

- (3) *Herring (2001a) proposed the idea of CMD as one specialization of CMC. (P.10/AL/JO/S.2.2..1/Pr.1/L.16-17/Pg.26-27)*

Herring (2001a)	proposed the idea of CMD as one specialization of CMC.
Subject	
Actor	
topical	
THEME	Rheme

In example (3), the citation involves a simplex declarative clause, in which the ‘\_Subject’ constituent is the topical THEME. This represents an unmarked THEME since the ‘\_Subject’ is the THEME of the declarative clause. In Table 4.30, a demonstration is presented to show the similarities and/or differences in using the Marked/Unmarked THEME in the literature review chapter of AL and IT.

Table 4.30

*Marked and Unmarked Theme in the Literature Review of AL and IT Theses*

Discipline	Marked THEME	
Applied Linguistics	Frequency	587
	Percentage	65.95%
Information Technology	Frequency	303
	Percentage	34.5%
Total		890

Similar to the percentage of Interpersonal Theme, Topical Theme, Elliptical Theme, and Structural Theme, the percentage of Marked Theme is higher in the clauses of the citations used in the literature review chapter of AL. This was evident in the findings of Objective Two that included a subsection related to Circumstantial and the findings of Objective one that is related to modal adjuncts. These circumstantial constituents and modal adjuncts which were used dominantly in the citations of AL have a major role in creating a Marked Theme. The tendency of students in AL to add more details through using unessential constituents such as circumstantial could be a reason for the high use of the Marked Theme.

On the other hand, the citations used in the literature review chapter of IT have a lower number of circumstantial and Mood Adjuncts constituents that can function as a Marked Theme under the Textual meanings. Students in IT probably focused on the basic constituents in each clause. Hence, circumstantial realized by prepositional constituents were less used which resulted in a lower number of Marked THEME.

#### 4.2.4.4 Author as THEME or RHEME

The name of the cited author in the integral citations occurred either in the first part of the clause to function as the THEME or in the second part of the clause with the function of the Rheme. When functioning as THEME, the name of the cited author is introduced as a familiar type of information that is already known. On the other hand, when functioning as Rheme, the name of the cited author is presented as new information to be communicated to the reader.

Table 4.31

*Roles of the Cited Author as Theme/Rheme*

Discipline		Author as THEME	Author as RHEME
Applied	Frequency	2052	586
Linguistics	Percentage	72%	67.5%
Information	Frequency	798	288
Technology	Percentage	28%	32.95%
Total		2850	874

Table 4.31 demonstrates the dominance of the cited author as a Theme and a Rheme in the citations of the literature review chapter of AL. This shows the effect of field; in other words, AL is a field of a soft domain in which the name of the cited author is emphasized more, whereas the name of the cited author is emphasized less in the

citations of IT. Consequently, low percentage of the name of the cited author is used as Theme and/or Rheme in the citations of the literature review chapter of IT.

The intra-disciplinary comparison also shows that Author as Theme is used more than the Author as Rheme. This can reveal that EFL Arab postgraduates in AL would start with the name of the author as a type of information that is already known to the reader though it was mentioned for the first time in the text. On the other hand, employing the name of the cited author as a part of the Rheme may reveal that EFL PhD Arab postgraduates used the name of the cited author to increase the credibility of the cited information. Their unawareness of the implied meaning of such usages might be another reason for using the name of the cited author as part of Rheme.

#### **4.2.4.5 Summary of the Textual Meanings**

Objective Three discussed the textual meanings, which involved several aspects such as the types of THEME. Three Types of THEME, interpersonal, topical, and textual, were used in the clauses of the citations of AL and IT theses with a variety in their frequency and percentage. Using citations with clause complexes resulted in employing elliptical THEME and structural THEME. Arabic language might also have an effect on using the structural THEME due to having similar relative pronouns. Other aspects in the textual meanings included using the predicated THEME, marked THEME, and the role of the cited author as THEME and/or Rheme.

#### **4.2.5 RQ 1: Objective Four, Evaluation of the Citation Use**

Objective Four focuses on the second aspect of analysing the text. In other words, it involves an evaluation of the citations based on the linguistic analysis of the clauses used in citations by EFL Arab postgraduates in the literature review chapters of 20 AL and IT theses. Hence, this objective evaluates the use of citations in terms of the three language metafunctions: the interpersonal meanings, the ideational meanings, (experiential meanings and logical meanings), and the textual meanings.

##### **4.2.5.1 The Interpersonal Meanings**

The clauses of the citations that are analysed are organized in the form of a message. These clauses represent the interactive event that involves the writers (EFL Arab postgraduates) and the audience represented by the supervisor/s, examiners, and readers. The writers assumed the speech role of giving information in the form of statements through citing information from other sources and integrating it into their own writing in the literature review chapter of their PhD theses. Thus, the clause takes the form of the proposition because all clauses of the citations, except one, were employed in full declarative clauses (See Table 4.3).

Clauses as propositions represent that something is or is not. In other words, a thing can be either affirmed or denied. However, these two poles are not the only two possibilities. A proposition can be asserted, doubted, contradicted, claimed, accepted and insisted on with several degrees of certainty or of usuality. Such rhetorical strategies establish good characteristics of a literature review when used appropriately. For such a purpose, Finite elements, Mood Adjunct and Comment

Adjuncts were employed by EFL Arab postgraduates to argue about the probability, usuality, obligation and inclination of the propositions in the citations of AL and IT. The dominance of the Finite constituents (See Table 4.6) may reflect the familiarity of the EFL Arab postgraduates with these elements compared with the low use of Modal Adjuncts (See Figure 4.3). Using these elements to reveal the modalization and modulation was higher in the literature review chapter of AL when compared with the literature review chapter of IT. This probably reveals the tendency of the writers (EFL Arab postgraduates) to meet the expectations of their readers (audience). In the soft domain such as AL, there are no ‘sharp cut truths’; rather, they are based on the strength of the arguments. Therefore, using elements to reduce the assertion would be more acceptable to the members of such an academic community. However, the hard domains, such as IT, are established on truths. Thus, they must be either yes or no, and there is no place for between these poles.

The writers (EFL Arab postgraduates) may try to imitate the style of writing of the sources which they read and cited information from. That is, the writers in each academic community follow certain expressions and ideology in order to project their voice and keep in line with the norms and conventions of their academic community. This may justify the high use of Finite and Modal Adjuncts in the literature review chapter of AL more than the literature review chapter of IT. However, this does not mean that modalisation and modulation were used appropriately by EFL Arab postgraduates in AL and IT unless a comparison is made between the original sources and the cited information. Using a lower number of frequencies of modalisation and modulation in the literature review chapter of Information Technology can be attributed to the ideology and the epistemology of

the hard domain which is based on facts that are either are or are not. Therefore, using Finite and Modal Adjuncts to reveal that something is certain implies that it is less certain because when we are sure of something, modality is not used.

#### **4.2.5.2 The Ideational Meanings**

Evaluation of the citation use at the ideational metafunction involved two main aspects which are the experiential meanings and the logical meanings.

##### **4.2.5.2.1 The Experiential Meanings**

The material processes occupied the highest number of occurrence, followed by relational, verbal, mental, existential and behavioural ones (See Figure 4.13). This similarity between AL and IT in using the Transitivity System despite their different domains of knowledge may shed light on the shared perceptions of EFL Arab postgraduates in academic writing.

EFL Arab postgraduates' possible lack of vocabulary related to the processes used in academic writing resulted in such a sort of similarity. In addition, their insufficient knowledge of the implied evaluation of these processes may make them depend on the most common ones. EFL Arab postgraduates may also follow a similar strategy in summarizing the related articles when writing the literature review chapter of their PhD theses. For example, when reading sources and citing information from these sources, EFL Arab postgraduates may start with the name of the author who conducted a study and analysed documents or interviews. Hence, material processes might be the easiest ones to make a summary of a particular study.

For IT, using material and relational processes can be appropriate since it belongs to the hard domain that is based on facts. Therefore, using material processes is appropriate to reveal the methods and the experiments adopted in previous studies. In addition, the relational processes are the most appropriate ones to indicate facts. On the other hand, AL is a discipline of the soft domain that is based on arguments and persuasion. Consequently, using material processes with a high frequency is inappropriate. On the contrary, using verbal processes more than material processes would be more appropriate and convincing to the reader.

#### **4.2.5.2.2 The Logical Meanings**

The findings related to the logico-semantic relationships also showed similarity in the citations of AL and IT in terms of using *Expansion*, *Projection*, and a combination of *Expansion* and *Projection* (see Figure 4.15). This can be attributed to the probable shared perceptions and the effect of L1 of EFL Arab postgraduates regardless of their academic community. *Expansion* had the highest number of frequencies, followed by a combination of *Projection* and *Expansion*, whereas *Projection* had the lowest number of use. Using *Expansion* dominantly is an evitable result of the overuse of material and relations processes which are classified as non-projecting processes. Within *Expansion*, *Extension* was also used with a high frequency in both AL and IT. This may emphasize the tendency of EFL Arab postgraduate to show to their readers that they are quite familiar with their research study. Hence, they depended heavily on adding information in the second clause of the clause complex rather than enhancing or elaborating as other alternative types of *Expansion*.

The mixed type of Projection and Expansion which occupied the second rank in terms of the number of frequencies is probably the effect of the Arabic language as the mother tongue of EFL Arab postgraduates in AL and IT. Having similar structural conjunctions, such as *that* and *which* and the influence of the Arabic language might be a reason for using citations with more than two clauses. Lacking academic vocabulary and expressions that can reveal the concept properly might make EFL Arab postgraduates use more processes with more than two clauses in one citation. This resulted in citations with long statements. However, such a usage can reflect a sort of spoken style rather than a written genre. Written language differs from the spoken language in terms of the number of clauses in each sentence. For example, in spoken language, many clauses are used per sentence, whereas in written language, few clauses are used in a sentence.

Using Projection was used in some citations inappropriately through employing material processes in Projection. Such processes should be used mainly for Expansion rather than Projection. Hence, such a use implies that EFL Arab postgraduates have insufficient information in using processes appropriately in Projection.

#### 4.2.5.3 The Textual Meanings

Regarding the textual meanings, using the interpersonal THEME more than the Topical THEME may highlight some features of the AL as a soft domain of knowledge (see Table 4.27). Members in this domain likely attempt to employ more constituents in order to add more details, clarifications, and explanation to the concept that is communicated by a single clause. On the other hand, IT is a hard

domain, in which the focus is mainly on what is essential. Hence, writers in this domain would communicate the idea that is a real fact by employing the basic constituents of the clause.

As for the Elliptical THEME and Structural THEME, they were also used with a higher number of frequencies in the citations of AL (see Table 4.28). This might be attributed to the higher density of citations, whereby students depend mostly on citing information from other sources. On the other hand, students in IT use less citations since facts, such as equations and algorithms, do not need many citations to support a fact or a method that is already established. Using Elliptical THEME with a higher frequency entails the high use of Expansion and a combination of Expansion and Projection, compared with the low use of Projection. Using an Elliptical THEME also reveals that EFL Arab postgraduates depend on a Topical THEME for one clause, whereas the other clauses are used with an Elliptical THEME in one citation. Employing the structural THEME in AL and IT can reflect EFL Arab postgraduates' strategy in using similar structures to their L1. Hence, using the Elliptical Theme and the Structural THEME might be the cause of using long citations with multiple clauses. This can be on the one hand advantageous for presenting a concept with a full description and explanation. On the other hand, using long citations probably reflects a spoken style rather than a written one.

The predicated THEME and the marked THEME are also other linguistic features that emphasize the division between AL as a soft domain and IT as a hard one (see Tables 4.29 and 4.30). This might show the flexibility in using language academically by EFL Arab postgraduates in AL. On the other hand, EFL Arab

postgraduates in IT are either limited in using these linguistic structures or they have insufficient knowledge in using such structural expressions. In addition, using the author as THEME or Rheme in the citations of AL and IT implies that EFL Arab postgraduates lay emphasis on the name of the cited author to highlight specific points or increase credibility of the communicated idea (see Table 4.31). In soft domains such as AL, using the names of expert writers and authors might strengthen the argument. Consequently, using integral citations by EFL Arab postgraduates in AL could be described as appropriate. On the other hand, the over use of the name of the author in hard domains such as IT as was used by EFL Arab postgraduates might be inappropriate. IT is based on fact; hence, the name of the author implies that the information is true, but it does not increase its strength. Based on the interviews with IT students in the present study, they believe that the name of the cited author increases the credibility of the information. Consequently, they tend to use the integral citation more than the non-integral citation. It is obvious that the students adopted their own perceptions towards citation use since, as they claimed, not enough guidelines and instructions were taught to them regarding citation use.

#### **4.2.5.4 Summary of the Evaluation of Citation Use**

The evaluation of the citation use was based on the linguistic analysis of the clauses used in the citations. This evaluation involved the use of the clauses in citations under the three language metafunctions: interpersonal, ideational, and textual. The main focus was on appropriate or inappropriate use of the clauses, such as using citations with long statements, using material processes for projection, focusing on the author rather than on ideas and concepts, and the overuse of material processes in the literature review chapter of AL.

#### 4.2.6 RQ 2, Objective Five, Part One: Challenges in Using Citations

This section addresses part one of the fifth objective that is related to the challenges faced by EFL PhD Arab postgraduates in citing the information from the original sources, such as articles, survey papers, books, and PhD theses, and integrating it into the literature review chapter of their PhD proposals. Challenges in using citations in the present study were not limited only to using the citation types. Rather, EFL Arab postgraduates experienced difficulties in citing information in terms of credible sources, adopting a stance towards the citation, insufficient knowledge in using citations, paraphrasing, the effect of L1, and L2 academic writing. Table 4.32 shows the major themes that emerged from the discourse-based interviews with EFL Arab postgraduate participants.

Table 4.32

*Challenges in Citations Faced by EFL Arab Postgraduates*

No	Major themes	Minor themes	%
1	Credibility	1) Credibility of cited information	44.44%
		2) Wrong findings	
2	Adopting a stance towards citation	1) Facts	88.88%
		2) Low level of Knowledge	
		3) Lack of evaluative vocabulary	
		4) Politeness and tension	
3	Insufficient knowledge in using citations	1) Limited guidelines and instructions	88.88%
		2) Misbelief about citations	
4	Paraphrasing	-----	55.55%
5	L2 academic writing	-----	77.77%

##### 4.2.6.1 Credibility

One of the challenges that is faced by EFL Arab postgraduates in the process of citing information to be used in their literature review chapter of their PhD proposals is the quality of the information in the published sources. In other words, citing the information from the original sources requires validating the content of these sources

in terms of the methodology followed in these sources, the obtained findings, and the cited information that is employed by the authors of these sources in the literature review section of these sources. 44.44% of EFL Arab postgraduates faced this challenge which entails two other problems: lack of credibility in the cited information and wrong findings.

#### **4.2.6.1.1 Credibility of Cited Information**

In their preparation for writing their PhD proposals, EFL Arab postgraduates read the different sections of the published sources, including the abstract, the introduction, the related studies, the methodology, the findings, the discussion, and the conclusion. In order to get benefits from the literature review section of the published sources, EFL Arab postgraduates cited information from the literature review section of these sources. However, some authors of these sources, as one of the participants claimed, use ‘strange words’ to avoid plagiarism; therefore, the original meaning of the cited information could be changed due to lack of honesty or accuracy in citing the information. This might also imply that EFL Arab postgraduates are not familiar with the vocabulary used by some authors in published sources. Lack of trust in the cited information forces Participant 1 to obtain the original source in order to make sure of the original meaning of the cited information. What complicates the matter is having several versions of the source of the information and inability to find the original source. 44.44% of the participants revealed that the issue of credibility does form a challenge to them in the citation process. For Participant 1, there is a problem in identifying whether the cited information in the related studies section of the article really reflects the idea of the original source from which it was cited or not.

*„This is originally one of the problems that we notice and face. There is no credibility in citing the information from the original source. (Participant 1/IT/YE/M)*

*Among the problems was in not citing the information exactly on the part of the author. When you cite from a certain article, you do not really know if the author cites exactly the information from the original source or not, and this was one of the challenges, where we are forced to go back two times and three times to the original source in order to make sure of the credibility of the cited information””(Participant 1/IT/YE/M)*

Survey papers formed a basic source of information for doctoral students in IT. These types of sources are mainly critical and address a certain topic from several aspects. Therefore, such sources are considered to have rich information. Thus, students cite information from such survey papers and integrate it into their literature review chapter of their PhD proposals. However, the cited information in the literature review section of these types of articles may not be true, as Participant 1 reported. Thus, students have to look for the original source. Participant 1 adds that some authors may change the meaning of the cited information in their articles. In other words, their use of ‘strange’ vocabulary to avoid plagiarism in the literature review section of their articles resulted in a change of the meaning of the original idea.

*„Some writers, when he tries to criticize in his article, he changes the whole sentence; he uses strange words in order to avoid plagiarism, thus he changes the meaning of the original source.””(Participant 1/IT/YE/M)*

Consequently, the name of the author has its importance in the hard domain, as the participants in IT revealed, because it gives more credibility to the information. This makes Participant 5 depend on the names of the authors who are experts in the research area in order to identify that the cited information is trusted and conveys a similar idea to the original one.

*„The first thing, we try to be frank. The paper and the researcher have a role. There are papers and researchers who are trusted, so you, through your domain, start to realize who is trusted and who is not””(Participant 5/IT/SY/M)*

Similarly, Participant 6 comments that the name of the author reveals the credibility of the cited information. If the author is a reputable expert in the research area, the cited information is credible and trusted since the author is honest in citing the information as Participants 5 and 6 assumed.

*So, when you find the name of the author, it will motivate you that, is this author honest in citing the sentence? And this depends on the name of the author himself, and depends where the paper was published and in which year. (Participant 6/IT/IR/M)*

Using the integral citation more than the non-integral citation in the literature review chapters of the 20 PhD theses in the present study may imply the attempt of EFL Arab postgraduates to tell the reader that the information he/or she cited is trusted since it belongs to an author who is an expert in the field. Though the literature review section of published articles and survey papers constituted a rich source of information for students, lack of credibility in the citations poses a challenge for EFL Arab postgraduates who are required to check the original sources of these citations. Consequently, students should cite information from sources with findings that are reliable and credible.

#### **4.2.6.1.2 Wrong Findings**

The findings section of published articles is another basic source of information which EFL Arab postgraduates depended on to cite the information from and used it in writing the literature review chapter of their PhD proposals. However, as two of the participants claimed, some research articles which are published by some conferences include findings that are incorrect. In other words, if the same methodology followed by another researcher, different findings will be obtained. This poses the challenge of whether to trust the information in such types of articles or not. For Participant 6, citing the information from the findings of some articles

poses a challenge since there are no criteria to follow in order to make sure that these findings are really correct or not.

*„Sometimes, some papers especially in the new areas, they have findings, and these findings are somehow nice, but to what extent are these findings credible? And how can we know that these findings are Ok or not? Frankly, this is one of the problems that faced me. (Participant 6/IT/IR/M)*

*„And the issue that is questionable for me here is how do we trust a paper? Is there a specific way to follow in order to trust the paper? Or shall we consider that there is a scientific credibility and accept it as everything is valid? This is one of the things that raised several questions during this stage“ (Participant 6/IT/IR/M)*

Writing the PhD proposal necessitates a student to include information from articles that have been published lately, otherwise, the cited information is considered out of date. However, EFL Arab postgraduates had challenges when citing the information from some articles that have been recently published since the findings obtained in such articles are incorrect. For Participant 5, two interrelated challenges faced him. He had to update his references and in-text citations with the most recent ones since a PhD study may take five years of preparation. On the other hand, even though the findings in some of these recent published articles might not be reliable, he had to include them in his PhD thesis to be academically accepted for including the most recent studies.

*„Some papers have vague findings, and some other papers, when you examine them carefully, you will notice that there is something wrong. But only because they are recent, I have to include them in the literature review or problem statement“ (Participant 5/IT/SY/M)*

The low level of knowledge at the beginning of PhD study affected EFL Arab postgraduates negatively due to their inability to determine the validity and the credibility of the information that is published in some research articles. In other words, students at the initial stages of writing the PhD proposal cannot identify the strength, the weaknesses, and the correctness of the information. Therefore,

Participant 6 is not sure of what to cite in order to support his claim and justify his methods.

*„I have great challenges in such issue, the issue of writing, the issue of whether this information is strong enough or not? Is this information trusted or not? Because we had insufficient experience in such matters, thus challenges do exist” (Participant 6/IT/IR/M)*

It can be argued that citation is associated directly with reading sources, such as articles, survey papers, books, and theses. More readings will guide students to identify the type of reliable sources, the solid findings and the expert writers of the field. On the other hand, less reading will result in a failure to identify what types of sources to read and which information to cite. Consequently, writing the literature review chapter of the PhD proposal could form an obstacle for students, particularly novice writers who have insufficient research backgrounds. If the student writer is not capable to determine the quality of the information, such as its strength or weakness, s/he most probably will not be able to adopt an attitude to either negate or support the citation. More details about evaluating the citation and positioning oneself is presented in the following discussion.

#### **4.2.6.2 Adopting a Stance towards Citation**

Another challenge faced by EFL PhD Arab postgraduates in reporting information from the original sources is adopting a stance towards the citation. Using either type of citations implies evaluation. Hence, citation is strongly associated with evaluation. However, reporting information from other sources without discussing the limitations, the weaknesses, and the strengths of such information will not make students' writings effectively argumentative and convincing to their readers. 88.88% of the participants reveal that they have a difficulty in adopting a stance towards the citations. Several factors affected the participants in the aspect of adopting a stance,

including facts, low level of knowledge, lack of evaluative vocabulary, as well as politeness and tension.

#### 4.2.6.2.1 Facts

The field is a significant issue that strongly affected EFL Arab postgraduates in IT in adopting an attitude. IT is classified as a hard domain that is based on facts rather than arguments. Consequently, students in such domain are limited by their field, and they are not allowed to express their points of views towards the information they cited as some of the participants pointed out. Thus, IT, as a field of a hard domain, has its disciplinary influences on EFL Arab postgraduates' attempt to criticize the findings of other studies, particularly during the proposal stage preparation. For Participant 8, IT is based on facts; therefore, the information is cited from its source and integrated in one's writing without revealing one's subjectivity and personal comments.

*„Our area is about facts in real life and tangible problems for any person; it is somehow complicated, but it is easy. Therefore, we are not free to use the terminology and play on words. When you deal with facts, you have to mention them explicitly away from your personal opinion because you are not allowed to express your own opinion””(Participant 8/IT/JO/M)*

Similarly, Participant 1 depends on reporting only during the PhD proposal preparation rather than criticizing since it is an established fact.

*„It depends. Of course, if it is a fact, it is difficult, it is a fact; it is something that is agreed on.””(Participant 1/IT/YE/M)*

In addition, Participant 5 revealed a similar idea to Participants 1 and 8 in terms of limiting the citation to reporting only without adopting a stance. In other words, since IT deals with factual information, expressions that reveal possibilities and probabilities are less used.

*I repeat again, we in computer science do not have „may“; there is no room for possibility, but we often talk about facts and results, and mechanisms. „May“ does exist, but it does not form the majority; therefore, I tend to use words which, when they are read by readers, reveal that this thing has been already done and it is confirmed 100%. It indicates that something has been done and finished, and undoubtedly confirmed. (Participant 5/IT/SY/M)*

Because IT deals with facts, EFL Arab postgraduates depended mainly on reporting the information from its sources with no clear or direct attitude towards the citations, particularly during the proposal stage preparation. However, this may result in a literature review that is not critical; it will involve only a sort of a summary of previous studies with the absence of the writer's views.

#### **4.2.6.2.2 Low Level of Knowledge**

EFL Arab students' level of knowledge in their field of study at the beginning of their PhD study is still insufficient. In other words, when students started preparing for writing their PhD proposals, they were not able to position themselves within the previous studies. This can be attributed to their low level of knowledge in their study and their unfamiliarity with their research topic. Therefore, the student's position is not strong enough to enable him/her to criticize or argue about a certain issue. Consequently, citing at this stage depended mainly on reporting the information only without adopting an attitude towards it. Student's low level of knowledge is limited; hence, a student cannot realize whether the cited information is an established fact or an argumentative issue that allows for either supporting or opposing.

For Participant 5, during the PhD proposal preparation stage, a student is not able to adopt a stance towards the citation since he is not really familiar with all aspects of

his topic within his research area. However, this stance changes at the final stages of the PhD.

*„At the beginning and till the proposal defense stage, my attitude is often not clear, you know. It means that if a strong paper criticizes, then I agree with it, because at that time, I was not in a position to have my own personal opinion, you know. But now, after I have read and have more experience, I have had my personal point of view, but at the beginning and till the proposal defense, my opinion was not very much clear, and if you look here at the tables of comparison (referring to his proposal) it is true that I myself made them, but they are also based on what has been written in the survey paper. I added some information, but my point of view here was weak, and does not exist.”*(Participant 5/IT/SY/M)

Similarly, Participant 3 at the PhD proposal stage was not able to identify which information is a fact and which one represents an argumentative piece of information. Therefore, for him, the quality of the article reveals the strength or the weakness of the information and forms a basis for his stance.

*„When you do not cover all aspects of your study, you will not be able to determine if the information that you cited is a fact or argumentative. Therefore, as I told you, I cited the information in general, based on the fact that the information is taken from an article of a strong journal or with a high impact factor. At that time, I do not think that I was able to differentiate or determine the degree of the credibility of this information.”*(Participant 3/IT/LI/M)

Participant 1 also expressed a similar opinion regarding adopting a stance towards the citation during the proposal preparation stage. At this stage, citing for him did not involve his own critique due to his low level of knowledge in his research area.

*„Usually there are three to four stages. Sometimes, the low level of knowledge could not help me in adding critical addition. It is enough as I have three paraphrased sentences. I depended only on reporting; you cannot criticize, especially in the proposal stage because there are no findings to support”*(Participant 1/IT/YE/M)

The weak position of the student during the PhD proposal preparation is based on the fact that s/he is still involved in reading and the topic under research has not been covered entirely. Thus, this negatively affected his/her way of citing and evaluating the cited information. It is probable that lack of the depth of reading and

understanding and/or reading irrelevant studies could be a reason for having a difficulty in adopting a stance towards citation.

#### 4.2.6.2.3 Lack of Evaluative Vocabulary

Evaluating the cited information requires the student to be familiar with the expressions that are used to criticize, emphasize or show doubt. However, lacking knowledge in the evaluative expressions formed another obstacle that limited students' attempt to evaluate the reported information. Consequently, adopting a stance towards the citation was limited to using the conjunctive expressions *however* and *but* to contradict an idea, the reporting verbs *state* and *emphasize* to highlight an idea, and the reporting verbs *daim* and *declare* to criticize other researchers' works.

Participant 3 is not familiar with the expressions used to show degrees of certainty, usuality and probability. Therefore, for him, evaluating the cited information is achieved generally by using multiple citations that agree or disagree with a certain idea.

*"I do not know, I comment in general. I do not know if there are specific words that we use"* (Participant 3/IT/LI/M)

It seems that EFL Arab postgraduates depended on the most common devices, such as verbs and conjunctions, in order to show their stance towards the citation. They acquired these expressions and vocabulary implicitly through reading sources, such as research articles, dissertations and PhD theses.

#### 4.2.6.2.4 Politeness and Tension

Politeness is another factor that limits the students from evaluating the cited information. The student is hesitant to criticize other authors' findings because, for Participant 4, it is impolite to underestimate their works since these studies consumed much time and much effort on the part of the author. Hence, being polite towards other authors' works affected the students in adopting an attitude towards the citation. Consequently, evaluating the cited statement was based mainly on revealing the limitations of other studies, such as the population of the study, the type of the sampling, the area of the study, and the number of the respondents. In other words, the evaluation of the cited information was based on methodological limitations.

For example, Participant 4 avoided criticizing other researchers' findings out of politeness and respect of other researchers' efforts. Hence, showing the limitations in the previous studies, such as the population, the sample size, and scope of the study, was adopted instead of displaying a direct critique.

*„I do not doubt the credibility of the study and the researcher. In order to be polite in criticism of others, I say Ahmad stated within his study, he found that this variable was significant, but the limitation with Ahmad's work was the number of the respondents was small. The scope of his study was only in one hospital; therefore, I cannot generalize the findings of Ahmad, and these findings reflect only the environment of only one hospital. I do not decrease the importance of his work, but I depend on the size of the population. For example, for this study, the scope for this study, if it was limited, I say that these findings do not form the majority because the study was limited within its scope, in this way.“ (Participant 4/IT/IR/M)*

As was clarified by Participant 4, adopting a stance towards the citation was achieved through discussing the methodological limitations of other studies due to two main reasons, which are showing respect to other researchers and revealing politeness. This might reflect that EFL students have a different aspect of the issue of

stance. In other words, their cultural background probably affected their way of critiquing.

The avoidance to adopt an attitude towards the citation was also attributed to the student's tension. That is to say, the student is afraid that the cited work that was criticized may belong to one of the examiners at the PhD proposal defense session or the viva session. Thus, as Participant 5 assumes, criticizing their works by the student may evoke a kind of tension between the student and the examiner.

*„When you see a student whose writing is full of criticism, and use strong words, (such what?) bad performance, poor performance, lack of efficiency, for example. I am not against using these words, because there exist such mechanisms. But when you only focus on such expressions and forget what they have contributed even if we cannot find it now, this may create a sort of tension for the evaluator, specifically, imagine that by accident, one of the works belong to the evaluator. In such a case, the tension will be higher, you know.”* (Participant 5/IT/SY/M)

It can be said that politeness and tension formed another reason for abstaining from criticizing other authors' works by EFL Arab postgraduates. Instead of employing evaluative expressions to show the weakness of other authors' findings, EFL Arab postgraduates demonstrated the limitations of these studies through referring to the population, the sampling, and the scope of the study. EFL Arab postgraduates may have incomplete knowledge about evaluating and assessing other researchers' works. Consequently, they think that criticizing a certain work implies criticizing the researcher. The cultural background of EFL Arab postgraduates might lie behind the reluctance to criticize other researchers' studies and findings. This could be similar to other writers from other nationalities, such as Spanish, Iranian and Malaysian writers who report the information neutrally. In summary, it can be concluded that showing the attitude towards the citations can be probably affected by field, the low level of

knowledge of one's topic at the beginning of PhD study, lack of knowledge of the evaluative vocabulary, and showing politeness and tension.

#### **4.2.6.3 Insufficient Knowledge in Using Citations**

Students in IT depended on either APA (author, date) referencing style or the numbering system in using citations. The majority of the students who follow the Vancouver (numbering) system depended mainly on a software, such as endnote to help them in citation and referencing. However, 88.88% of EFL PhD Arab postgraduates reported that teaching citation was inadequate. Due to the insufficient knowledge in using citations, EFL Arab students used the two types of citations inappropriately. In other words, they do not know that the integral citation and non-integral citation have implied evaluation. Consequently, they chose either type of citations randomly according to their own perceptions or chose either type of citations to change the monotonous presentation of the cited information.

##### **4.2.6.3.1 Limited Guidelines and Instructions**

EFL Arab postgraduates' unawareness of how to use the integral or the non-integral citation is due to their insufficient knowledge in using citations. The majority of the students attended courses of Research Methodology and Academic Writing at the beginning of their postgraduate study. In academic writing course, although students received information about citations usages, it was insufficient and focused on author/date referencing style rather than Vancouver numbering system. Some participants in IT used IEEE (Numbering) system in citations that is different from APA (author, date) system. Participant 8 in IT does not have enough information

about using citation, particularly in using numbering style since the information he received focused only on APA style.

*„No, no, in this way, no. I only learned how to make citation using APA style. I remember this, in the master's degree only”” (Participant 8/IT/JO/M)*

Participant 1 also revealed that no information about using citations was received during the academic writing and research methodology courses.

*„I repeat again, unfortunately, we did not study such issues at all. Even in academic writing, we learned how to write an essay. For example, citations, how to criticize, how to report, to be critique, the verbs that should be used, how to use it, favouring verbs, all these we have not learned.”” (Participant 1/IT/YE/M)*

For Participant 4, though he attended Research Methodology and Academic Writing courses, he did not get enough information on using citations.

*It was improved through reading. The benefit I got from research methodology and academic writing was limited. Frankly, my writing was enhanced through reading continuously. (Participant 4/IT/IR/M)*

As claimed by EFL Arab participants, teaching citation was not received at the beginning of their PhD study and only limited information focused on using citations. Hence, the supervisor's feedback on their writing and following the style of other PhD theses were the only two sources of knowledge for using citations. Due to having limited information related to using citations, EFL Arab postgraduates selected either type of citations, the integral or the non-integral, randomly to avoid the repetitive way of presenting the information. This performance reflects that EFL Arab students are unaware of the evaluation implied in each type of citations.

#### **4.2.6.3.2 Misbelief about Citations**

Due to the insufficient knowledge in using citations, EFL Arab postgraduates used citations based on their own belief. For example, they used the integral citation to

emphasize an idea. Their belief depended mainly on the name of the cited author that can give more credibility to the cited information. For them, citing the information and providing details about the name/s of the cited author/s, date of the publication, and the number of the reference make the reader and the examiner more confident of the significance of the reported information. Although some participants prefer using the non-integral citation, they believe that using the integral citation provides more strength to the cited information. Therefore, such a usage, according to the participants, was used to emphasize ideas. Participant 5 in IT believes that the integral citation gives more strength to the idea since the name of the author is mentioned.

*“Mentioning the name of the author with the number of the reference is a sort of more emphasis, and I feel that it is stronger information, I feel so. As I told you, I am in the academic writing and such matters, my information in such matters may not be completely accurate”* (Participant 5/IT/SY/M)

Participant 8 in IT also shares a similar belief with Participant 5 in terms of using citations to highlight ideas; he believes that the integral citation is used to emphasize the idea.

*“Frankly, in my thesis or in my study, I used example 3 (non-integral citation) and example 4 (integral citation), but when I want to emphasize and highlight an idea. When I want to highlight and do not want to say that this is my idea, I use the author’s name together with the reference.”* (Participant 8/IT/JO/M)

Hence, the citation types were used randomly based on the students’ own perceptions since EFL Arab postgraduates have not learned how to use the citations appropriately and for which purposes.

It can be argued, based on the students’ use and perceptions, that teaching citation has not been given a lot of interest; rather, the focus was directed towards other aspects, such as writing essays, the organisation of thesis, and what to write in each chapter.

Consequently, academic writing course should focus on citations as an important issue of academic writing.

#### 4.2.6.4 Paraphrasing

In the process of citing the information from the original sources, such as articles, survey papers, theses, and books, paraphrasing the cited information formed another challenging issue for EFL Arab students in AL and IT. 55.55% of EFL PhD Arab postgraduates revealed that they have a difficulty in paraphrasing. At the beginning of their PhD study, EFL Arab postgraduates depended basically on copying/pasting procedure. They only copied the cited information and pasted it in a word document, then later, they paraphrased it. For example, Participant 7 had challenges in paraphrasing the cited information due to translating the idea into Arabic and rewriting the idea in English based on the interpretation of the idea by means of L1.

*„Yes, sometimes, I face a problem in paraphrasing that quoted information due to misinterpretation which resulted from using Arabic language“.* (Participant 7/AL/IR/F)

Participant 2 and Participant 9 also had problems in paraphrasing the cited information since paraphrasing entails using different vocabulary to avoid plagiarism and reveal a similar concept to the original one.

*„After finding the source, the language begets problems for us especially in doing the paraphrasing and select the right diction“.* (Participant 2/AL/JO/M)

*„I do face problem of using vocabulary that adequately fit the one already used in the text so as to maintain the originality.“* (Participant 9/AL/IR/F)

EFL Arab postgraduates do have problems in citations represented by challenges of paraphrasing the citation. They need to rephrase the cited information in a way that keeps the original meaning and avoids the similarity. Hence, lacking academic vocabulary formed the main obstacle in the process of paraphrasing.

Paraphrasing the cited information entails another challenge for EFL Arab postgraduates. In other words, the students' challenge is associated with presenting or rephrasing the reported information in an ideal way. Paraphrasing the cited information requires the student to present it in a new way that reveals his/her own style of writing and keeps the original meaning of the cited information.

Paraphrasing the cited information in the student's own way and keeping the original meaning of the reported information resulted in further associated challenges. These included the challenge of plagiarism, the challenge of changing the meaning of the original statement and students' inability to deliver the information accurately.

*„You have the idea in your mind, but when you reread what you have written, you find that the idea is different from the original one“*” (Participant 5/IT/SY/M)

*„I do face problem of using vocabulary that adequately fit the one already used in the text so as to maintain the originality.“*”(Participant 9/AL/IR/F)

It can be said that paraphrasing formed a great challenge to EFL Arab postgraduates due to having insufficient vocabulary that can help them rephrase the cited information in an ideal way and keep the original meaning of the citation.

#### **4.2.6.5 L2 Academic Writing**

Citing the information from articles, survey papers, books, and theses and integrating it into one's writing was also affected by EFL Arab postgraduates' L1. All the participants' L1 in the present study is Arabic, but they had to write in English as a Foreign Language. 66.66% of EFL Arab participants reported the negative effect of L1 on their L2 when citing the information. The two languages, English and Arabic, are different in terms of vocabulary, structures, and grammar. Hence, the process of citing the information and integrating it into the literature review resulted in diverse

issues related to L1. First, the idea is translated into Arabic to understand it and rewrite the idea in English based on the Arabic interpretation. Second, there was a difficulty in understanding students' writing by the supervisor(s) and examiner(s).

For participant 8, his L1 affects his writing of citations positively and negatively. The positive effect is represented by selecting English vocabulary that is equivalent to strong Arabic vocabulary. On the other hand, the negative effect of Arabic language is embodied in thinking in Arabic and writing in English.

*„Yes, it affects both of them to be honest. In Arabic we use a lot of expressions. Arabic language is no doubt a strong language, and when we compare it with English or translate literally, word by word, this is catastrophic and this is the way we use. We think in Arabic and speak in English. This is a disadvantage. The positive effect of the Arabic language sometimes gives you shortcuts. Instead of writing a long sentence in English to express a small idea, you can look for an equivalent word in Arabic. For example, instead of saying today is very crowded, in Arabic we say „Zahma“, and that is all“.” (Participant 8/IT/JO/M)*

Participant 7's perceptions on the effect of Arabic language on citations were also similar to Participant 8. In other words, L1 affected her citations positively and negatively. The positive aspect was represented by translating the idea of the English source into Arabic in order to understand it and rewrite it in English using her own expressions. On the other hand, employing the Arabic language in translation resulted in misinterpretation of the idea of the citation.

*„Yes, sometimes, when I read about certain information and do not understand it, I translate it into Arabic for clarification. When I understand it, I can paraphrase it and restate it using my own expression. But, sometimes, I face a problem in paraphrasing that quoted information due to misinterpretation which resulted from using Arabic language. So, it can be said that the researcher's native language may affect positively or negatively on the way of citing or writing.“” (Participant 7/AL/IR/F)*

Processing the idea mentally in Arabic language and writing it in English results in a difficulty in understanding the students' writings by the supervisor as well as the

examiner. This problem was faced by EFL Arab students and was commented on by the students' supervisors and the examiners during the proposal defense session. This was reported by Participant 3.

*„Sure, you always try to write in your mother tongue that is the Arabic way. you have a certain way of expressing, you find a difficulty in English and Arabic language, mostly. For example, one of the comments was by the examiner during the proposal defense. She mentioned that the majority of my sentences are used in my own mother tongue, and she said that some sentences are not clear.”*(Participant 3/IT/LI/M)

Based on the participants' comments, it is clear that EFL Arab postgraduates do experience the effect of L1 in the process of citing and writing positively and negatively. The negative effect of L1 resulted in unclear ideas that are difficult to be understood, whereas the positive influence represented by employing the Arabic language to select strong vocabulary equivalents and translate the concepts of the original sources.

Since citation is an essential part of academic writing, the process of citing the information from its original source and integrating it into one's literature review chapter demands a variety of academic writings skills. However, EFL Arab postgraduates, particularly in IT, faced challenges in writing and in citations. 77.77% of the participants reported that they had a challenge in using citation, mainly because they are not proficient in L2 academic writing as Participant 3 said.

*„There is a difficulty in writing in English, using grammar in general, and also academic writing, how to write academically, in an academic manner and citing in general”*(Participant 3/IT/LI/M).

Writing in English formed the most basic challenge since it entails several requirements, such as using appropriate grammar, using appropriate punctuations, and employing academic vocabulary and expressions. For example, the punctuation (;) was not used or it was rarely used in the writings of EFL Arab postgraduates.

During their preparation for writing a PhD proposal, EFL Arab students read theses at their university in order to be familiar with the style of writing, the structure of the thesis and other related issues. However, by following these PhD theses, EFL Arab students rarely used the punctuation (;) because it was not used in the PhD theses they read, as they claimed. Consequently, Participant 1 did not know how to use the semi-colon (;).

*„Frankly, for the semi-colon, I never used it. We have not learned such issues; our learning was based on following others. I could not find other researchers who used it in order to use it. The reason is I do not know how to use it and could not find any other researchers who used it. I represent others in their way of writing. ””(Participant 1/IT/YE/M)*

Using punctuations, such as the semi-colon (;), is very essential when using citations with clause complexes. However, the absence of the semi-colon may result in the low use of Elaboration as a subtype of logico-semantic relationships in citation with clause complexes. Participant 3 added another problem related to writing in English, writing academically, using verbs in the citations as well as using tenses of these verbs.

*„I lack a lot of information in academic writing and English language in general and also using verbs and tenses in writing”.””(Participant 3/IT/LI/M)*

English is not their native language; therefore, EFL Arab postgraduates do not know which expressions and terminologies are more appropriate, stronger, and suitable for the academic context. This forced Participant 5 to memorize implicitly the expressions through reading the different sources in his field.

*„There might be other expressions, but you do not know which one is the most appropriate, which is the strongest, and which one is most appropriate in the academic field. I have become trying indirectly to memorize these expressions through reading the papers.””(Participant 5/IT/SY/M)*

Writing long sentences was also one of the problems that faced EFL Arab students due to the overuse of the relative pronouns *that* and *which* and the effect of L1. For example, Participant 5 used long sentences inappropriately due to the frequent use of the relative pronouns. Thus, the number of committing grammatical mistakes increased in these long sentences.

*„I had a sort of inappropriate use of long sentences, then I tried to make the sentences shorter, I omit „which“ part. Sometimes, when I write, the sentence is three lines long, and when the sentence is long, the average of making mistakes may increase. You are using a compound sentence that has connectors, so I tried to use „that“ and „which“ only when necessary, but when I started writing, I use „that“ and „which“ repeatedly.““*  
(Participant 5/IT/SY/M)

Using citations with long statements was evident in analysing the logico-semantic relationships of citations with clause complexes in the literature review chapters of 20 PhD theses. In these logico-semantic relations, EFL Arab postgraduates used a combination of *Projection* and *Expansion* in one citation due to using more than two clauses in each citation. However, using citations with long statements reflects a spoken type of genre rather than a written one. Participant 6 adds that the long sentences have more details, but the idea is not communicated correctly.

*„We up till now, our thinking in structuring the sentence is Arabic thinking rather than English thinking in writing. Therefore, our sentences are always long, have a lot of explanations, and do not communicate the idea correctly and exactly““* (Participant 6/IT/IR/M)

Writing in English in general and writing citations academically constituted a great challenge to EFL PhD Arab postgraduates since L2 academic writing requires mastering several issues, such as academic vocabulary and expressions, correct grammar, and correct use of punctuations. However, their low proficiency in English and the influence of their L1 resulted in inappropriate use of writing the citations academically.

#### 4.2.6.6 Summary of Objective Five (Part One)

In summary, citing information from the different sources and integrating it into the literature review chapter of PhD proposals posed several challenges during reading, paraphrasing, and writing. These difficulties could imply that EFL Arab students are weak in academic writing in general and using citations in particular which can be another barrier that hinders them from achieving academic success in their PhD study.

#### 4.2.7 RQ 3, Objective Five (Part Two)

The interviews with three PhD supervisors from AL and two PhD supervisors from IT revealed significant findings regarding the challenges of EFL Arab postgraduates in using citations when writing the literature review chapter of their PhD proposals. These difficulties were represented by lack of the depth of reading, using citations, L2 writing skills, and positioning themselves within the academic community of their studies. Challenges in using citations involved reading and writing skills because a student cites what has been read. Therefore, such findings are probably more comprehensive since they reflect several skills of language that are employed in using citations. Table 4.33 demonstrates the perspectives of PhD supervisors towards the challenges in using citations by EFL Arab postgraduates.

Table 4.33

*Perspectives of Supervisors on Challenges of Citations by EFL Arab Postgraduates*

No	Major Themes	%
1	Lack of reading depth	60%
2	Using citations	100%
3	L2 writing skills	100%
4	Positioning	100%

#### 4.2.7.1 Lack of Reading Depth

The main problem that faces EFL Arab postgraduates when they started their PhD study is lacking research skills and having insufficient background in researching, such as lack of the depth of reading. 60% of the PhD supervisors reported that EFL Arab postgraduates lack the depth of reading when citing information to write the literature review chapter of their PhD proposals. Consequently, they would stumble in chapter two.

Starting a PhD study requires a student to read contemporary sources in order to have an idea about the current trends in the area of the investigation. However, EFL Arab postgraduates have a lack of the depth of reading. They do not internalize what they have read. Therefore, their depth of understanding of the area is limited and the level of thinking is not at the PhD level. Supervisor 1 comments on the aspect of lack of the depth of reading among EFL Arab postgraduates.

*All my PhD students, irrespective whether they are Arabs or Non-Arabs, usually they come with lack of reading, they are very interested to do a research, but usually they do not have the depth of the reading, the depth of understanding about the area. (Supervisor 1/AL/M)*

This does not mean that EFL Arab postgraduates do not read much for their study; rather, they could not get the ‘correct readings’ or they read unrelated studies. This resulted in writing everything in the literature review chapter with very few information related to the topic under investigation. Thus, their style of writing is more like a text-book rather than a PhD thesis. Supervisor 5 said that EFL Arab postgraduates depend mainly on paraphrasing that is considered not appropriate unless accompanied with a critical reviewing and digesting the information.

*They do not internalise the things, they need to digest the things, not just you take this part, you paraphrase it, you take this part, you paraphrase it, and you try to make it critical, that is when I say, I refer to the word*

*correctness just now, you see. Sometimes, they just pretend to be critical, and they do not internalize it. (Supervisor 5/IT/M)*

Supervisor 4 added that EFL Arab postgraduates' literature review chapters involve a lot of unrelated studies.

*It is not directing toward his or her research questions, it is like everything is there. Only few parts of the literature review can be related to the research questions (Supervisor 4/AL/M)*

Supervisor 3 clarified the reason of the problem discussed by Supervisor 4 stating that EFL Arab postgraduates might be unable to get the correct readings. Therefore, their writings of the literature review chapters are beyond the focus of the research topic.

*I do agree to some extent that some students are not lucky enough, maybe they do not get the correct readings. (Supervisor 3/IT/F)*

Lack of the depth of reading and their inability to fully comprehend what they read resulted in having a lot of unrelated works in the literature review. Another possible reason for having much unrelated information in the literature review is due to citing information from books as available and easily understood references. Hence, it can be argued that reading is associated directly with citations. More deep readings probably results in effective citations.

#### **4.2.7.2 Using Citations**

EFL Arab postgraduates also had a problem in using citations. Students in AL use (author, date) referencing style, whereas students in IT use either (author, date) style or IEEE that is called numbering system. Since students are not exposed to APA manual, they used incorrect form of citations as the PhD supervisors reported. Instead of this, they used other conventions. Students who used IEEE also committed mistakes in using citations represented mainly by employing numbers as a reference

to be integrated with the structure of the clause in the citation. 100 % of the PhD supervisors emphasized that PhD Arab postgraduates experience a difficulty in using citations and their diverse aspects. Supervisor 4 mentioned that EFL Arab postgraduates are not completely familiar with the conventions of APA style. Therefore, a necessity arises to teach students how to use citations based on the standard norms of APA style.

*Some of them still use different conventions, that is not APA standard, that is from another standard, right. So, I think they are not exposed to the handbook or manual, APA manual. I think they should be more, probably we should conduct a workshop or something like that among postgraduate students and not necessarily for Arab students, for other students as well, on how to actually make use of APA. (Supervisor 4/AL/M)*

Similarly, Supervisor 3 added that EFL Arab postgraduates do not use numbering system (IEEE) correctly; rather, they make a combination with other styles of referencing which is considered incorrect.

*For me, this is not correct, this is not the correct style of writing in IEEE. I said, if you want to stick with IEEE, you have to master the style of writing in IEEE. If you want to use APA format, you have to master the style of writing in APA. (Supervisor 3/IT/F)*

EFL Arab postgraduates have insufficient knowledge in using citations. Therefore, the source of information on using citations was to learn implicitly from the style of writing of the sources that they have read. They may follow the style of books that they read or the PhD theses of other students who might also use citations inappropriately. Supervisor 2 said that due to their inability to paraphrase the information, EFL Arab students depended on quoting rather than paraphrasing.

*I noticed when students finally cannot paraphrase; of course, use the quotations to take the easy way out. They just quote and there should not be too many quotations, yeah, there should be more paraphrasing than quoting. (Supervisor 2/AL/F)*

Supervisor 1 added that the quotations were used without acknowledging the name of the cited author which entails plagiarism unintentionally.

*They have problems in paraphrasing; sometimes they quote without citing, right. When we check through Turn it in, suddenly, we tell them, oh, have you borrowed from other people's work? Yes. How come you did not cite? They did not know how to cite. Some Arab students also have problems in terms of whether, should they, the quotation, right, borrowing other people's work should also that be cited, so should that be acknowledged. They believe it should not be because they believe that other people's work is like their work too, should be shared by everybody. (Supervisor 1/AL/M)*

Supervisor 4 extended the issue of plagiarism when paraphrasing the cited information stating that their lack of 12 writing skills resulted in having plagiarism.

*Of course, most of the students, they do not do that intentionally, but since they have no idea; they are not aware actually of plagiarizing because they do not have the skill to do that, the writing skill. (Supervisor 4/AL/M)*

EFL Arab students' problem in paraphrasing may be attributed to their insufficient vocabulary or low proficiency in English. Therefore, their use of quotations appeared frequently, specifically in the literature review of AL. Another possible reason for using quotations repeatedly is due to the effect of the field. In other words, AL is classified within the soft domain, in which the strength of the arguments could probably depend on the exact vocabulary used by professional authors in the field. Consequently, the students in this domain employed quotations by the expert writers in the field in order to support their claims.

For Supervisor 5, EFL Arab postgraduates' use of citations was characterized as simple, in which one paragraph or two paragraphs were written and the name of the cited author is put in parentheses at the end of the paragraph in the form of a non-integral citation.

*With every paragraph, at the end of the paragraph, they put the brackets. If you look into the various previous literature that they do, at the end of the paragraph they put the brackets, at the end of the paragraph, they put the brackets, they put the brackets. And I keep asking them, why you put the brackets at the end of this. Every paragraph in the literature review and they put the brackets, it seems that everything of the whole paragraph refers to that particular person. (Supervisor 5/IT/M)*

In this regard, Supervisor 2 argues that using citations in such a way does not report clearly which part of the information belongs to the cited author and which part represents the writer's own ideas and comments.

*Yeah, sometimes, you do not know whether, which part comes from the author, and you have a whole, like two paragraphs or one paragraph, and suddenly the citation is there at the end. So, you do not know which part comes from the author. (Supervisor 2/AL/F)*

Using much cited information with one or two paragraphs that is accompanied by the non-integral type of citations may reveal the inability of EFL Arab postgraduates to add their own ideas or comments. As a result, they depended on using more citations. The attempt of EFL Arab students to attribute the cited information to a specific author rather than to them can be the other reason for using long citations with a non-integral citation at the end of the paragraph.

The citations that were used by EFL Arab postgraduates were not only simple but also characterized of having limited and repetitive kinds of reporting verbs as stated by Supervisor 1. Students tended to use the most common reporting verbs, such as *state* and *conducted*. Other reporting verbs are conversational rather than academic ones, such as the verb *say*.

*They use the word which is not academic like says, right, they would say, „says“ and they would repeat some of these reporting verbs, simple reporting verbs like „shows“ right, „says“, „said“, and I would not find a very good reporting verb like „argued“, no. I could not find that „emphasize“, „stress“, only very simple kind of citations. (Supervisor 1/AL/M)*

Supervisor 5 comments that such a use of the reporting verbs by EFL Arab postgraduates reflects a low level of thinking in judging and criticizing other researchers' works.

*If we relate this to the bloom level, may be at the beginning of their studies in order to, the level of thinking is not high, the author, it is not of a higher level. So, they tend to actually say something like that, oh, this one proposed, this one proposed, state that, you know, those are not of the level of arguing the work, you know, the level of judging the works. It is just simply mention the work is done by certain people, and the work for example. Oh, this person conducted, even this person analysed, but how do you judge it. (Supervisor 5/IT/M)*

Using conversational reporting verbs rather than academic ones may taint a piece of information with subjectivity. Hence, the limited use of the reporting verbs shows lack of the information of EFL Arab postgraduates on such issues. Therefore, for EFL Arab postgraduates, the only way to learn the use of such reporting verbs was to read sources, such as articles, survey papers, theses, and books. The other reason for employing limited reporting verbs might be attributed to reading articles of low reputable publishers that do not commit to a high standard level of publication.

#### **4.2.7.3 L2 Writing Skills**

In their attempts to read and cite information from other sources in order to integrate the cited information in their own writings, EFL Arab postgraduates had a problem in L2 academic writing. 100 % of the PhD supervisors revealed that EFL Arab postgraduates are challenged in their L2 academic writing. For Supervisor 1, EFL Arab postgraduates have a difficulty in using correct grammar and punctuations. For example, they do not know where to put a full stop, thus resulting in long sentences.

*The first year is usually the most critical year. The students have problems, trying, struggling, to write using correct grammar to write. They even have problems with punctuation, right, especially for Arab students. They have problem with punctuation, right. They do not know where to put the stop, the sentences are very long. (Supervisor 1/AL/M)*

English represents a real problem for EFL Arab postgraduates as reported by Supervisor 3, and their low proficiency in L2 writing skills resulted in a difficulty to understand students' writings.

*Ok, so, I think the first problem for most Arab postgraduates is English. I feel that most of them whether the ones that I supervised or for the ones I was the examiner, they do not have good skills in English, to communicate or using writing, just oral communication. So, I feel like they need to improve their English, so that is easier for the supervisors or the examiner to understand what they are trying to say. Sometimes, we have to, based on my students, I would ask them, what do you mean by this paragraph, what exactly do you mean by this, because, may be the way you write your sentences are based, influenced very much with your native language which is Arab. So, then you start making sentences which start with verb. So, I ask the supervisor, I have to look at the content, and I have to help my students in terms of the grammar as well.*  
(Supervisor 3/IT/F)

In the first year of the PhD study, EFL Arab students who have not conducted research before faced a lot of problems, especially in writing. For EFL Arab students, their L1 may have an influence on their writing, particularly in using long sentences. The similarity between Arabic and English in terms of the structural conjunctions, such as *that*, *which*, *if*, and *when*, probably led students to write sentences with multiple clauses (clause complexes).

EFL Arab postgraduates' writing is characterized of having long sentences with much explanation due to the influence of L1 on students' writing. Hence, the supervisor had a difficulty in understanding what the student means. In addition, the discussion with the students to comprehend what they really mean is time consuming. The problem in writing also represents a challenge for the students' supervisors who have to correct their grammatical and structural mistakes in order to get the meanings of their students' writings.

Their low proficiency in English was also reflected in using non-academic words and lacking the flow of ideas due to using the easiest discourse markers as Supervisor 2 said. This resulted in a disjointed content with lack of synthesis. In other words, in citing the information from other sources, EFL Arab postgraduates did not synthesize the citations together. Consequently, the literature review involved a sort of disjointed sentences and disjointed content.

*It is disjointed, the sentences are disjointed, the content itself is disjointed. It is just you know, what others, other persons, people have said what this topic, what this area, and another person comes, and another person; there is no synthesis. (Supervisor 2)*

EFL Arab students' low proficiency in English and the effect of their L1 resulted in several deficiencies in their writings of the literature review, such as long sentences, incorrect grammar use, incorrect punctuation use, and lack of synthesis of citations.

#### 4.2.7.4 Positioning

Since citation is associated with evaluation, the writings of EFL Arab postgraduates are characterized by either strong claims when interpreting the findings of their study or the absence of the stance in writing the literature review chapter of their PhD proposals. The absence of the hedges and the limited use of modal verbs and adverbs in students' citations and writings may be a reason for having such strong claims. 100 % of the supervisors declared that PhD Arab postgraduates have problems in adopting a stance when using citation. Supervisor 2 revealed that EFL Arab postgraduates tend to report strong claims. Therefore, they need to use adverbs such as *possibly* and *probably* in order to hedge their claims.

*I think in the PhD theses, you should not be too strong, it is like you show enough, like Arab students; they like to say no research has been conducted. So most Arabs say that. But Malaysian students do not; they tend to be more passive; they would say lack of research, there is lack of*

*research in this field. So, I think they should use some of these of course possibly, probably. (Supervisor 2/AL/F)*

The reason behind the strong claims by EFL Arab postgraduates is the limited use of adverbs and modal verbs as well as adopting the easiest ones as added by Supervisor 2.

*In a limited way, they can use. „Can“ is one of the modal verbs, they would use „can“ or „might“, or sometimes, „may“, but, „possibly“ and „probably“, „hardly“, „probably“ yeah no „hardly“. They just go for the common ones like „can“, „might“, and many of them leave them out, leave out these modal verbs, they do not even use them. (Supervisor 2)*

EFL Arab students tended to show the strength of their arguments by revealing strong claims, specifically in the interpretations of their findings, as was reported by Supervisor 1. This probably implies their attempt to persuade the reader including the examiner of the rationality and the significance of their study. Their unawareness of using hedges may be another reason for being so strong in their claims. In other words, lacking knowledge in using modal verbs and adverbs and their implication when used in academic writing resulted in having a strong position. However, in the soft domain such as AL, there should be a sort of hedging in order to convince the reader of the argument.

Other PhD students are not able to have a stance due to having low knowledge in the research area. That is to say, the low level of academic knowledge in one's research area does not enable the student to position himself/herself within the domain of the academic community. This was stated by Supervisor 3 and Supervisor 4.

*It is very difficult for beginning students to be critical because at the beginning of their research before they got their data because they are still unclear about the directions, about what they want, alright, so it takes time (Supervisor 4/AL/M)*

*I understand, sometimes they argue, do you expect us to, we are just new, we are starting six months so far. I have seen students who can, I have*

*supervised students who can and students who cannot yet before the viva. Ok, for the students who can, these are really hardworking students, good students, they live, they sleep, they eat, you know, with their PhD work. So, they can express their opinion within a year of duration of study, because they have read a lot. So, when you read a lot, you get a lot of information, a lot of different opinions on a certain aspect or different comments that other researchers shared with each other in the article. So they can use that to put a stance which one they would go to, you see. So, I would say that it is very much on the students how much they read.* (Supervisor 3/IT/F)

The failure to adopt a positioning by EFL PhD Arab postgraduates during the proposal stage can be attributed to the problem of being novice writers who have not become completely familiar with their research area. Hence, adopting a stance is not easy; rather, it requires a lot of readings of good articles that are closely related with one's research.

For Supervisor 5, the field is another factor that affects the stance. In other words, IT is a hard domain in which the truth is ultimately sharp. Therefore, using modal verbs and adverbs as hedges is not acceptable.

*If you have the simulations, and you know that the outcome of this analysis led to this type of the work, so it is very explicit, and you can decide it clearly right, so your judgement needs to be very sharp, the judgement needs to be very sharp. So if you still to use something like that, you know, possibly it is not, you know, you know some people are doing wrong, in front of your eyes, you know, in Arabic we call it what, ,kate'i", it is clear. In Arabic we say that Halal is clear and the unhalah is clear. So, these in IT work, you know are more in this clarity type of thing, and in between these two is not really. Well, it is there, the fuzzy part of it, but it needs to be stable, the stance must be clear.* (Supervisor 5/IT/M)

In conclusion, citing information from other sources posed several challenges on EFL Arab postgraduates. These difficulties involved lacking the depth of reading, insufficient knowledge in using citations, lacking L2 academic writing skills, and adopting a stance towards the citations. These challenges can be attributed to EFL

Arab postgraduates' low proficiency in English, the effect of L1, reading less related articles, and receiving insufficient information on using citations.

#### 4.2.7.5 Comparison of Students and Supervisors' Perspectives on Citation

The interviews with EFL Arab postgraduates and PhD supervisors could present significant aspects related to the challenges faced by EFL Arab postgraduates in using citations. Both groups of participants (EFL Arab postgraduates and PhD supervisors) revealed challenges in citations use that involved adopting a stance towards citation, lack of proficiency in L2 academic writing skills, the effect of L1, and insufficient knowledge in using citations. Table 4.34 summarizes the similarities and differences in the perceptions in using citations.

Table 4.34

*Students and Supervisors' Perceptions on Challenges of Using Citations*

	<b>Students' Perceptions on Challenges of Citations</b>	<b>Supervisors' Perceptions on Students' Challenges of Citations</b>
1	L2 academic writing Paraphrasing Effect of L1 on L2 Appropriate grammar, punctuation, Long statements	L2 writing skills Paraphrasing Effect of L1 on L2 Correct grammar, punctuation, Long statements
2	Adopting a stance towards citation Cannot adopt a stance or use evaluative vocabulary due to the effect of field, politeness, tension, and low level of knowledge	Positioning Lack of hedges and limited use of modal verbs and adverbs resulted in having strong claims
3	Insufficient knowledge in using citations	Using citations Simple types of citations

Table 4.34 continue

	Limited guidelines and instructions	Limited and non-academic reporting verbs
	Depending on their own perceptions	
4	Credibility	-----
5	-----	Lack of reading depth

Regarding L2 academic writing, both EFL Arab student participants and supervisor participants attributed challenges in using citations to the low proficiency of L2 academic writing. Since citations represent an essential aspect of academic writing, several difficulties occur, such as using appropriate grammar, using appropriate punctuations, and employing academic expressions and vocabulary. Due to student participants' low proficiency of L2 academic writing, they use non-academic words and lack flow of ideas. The insufficient level of L2 writing skills led student participants to use quotations frequently due to their inability to paraphrase.

In addition, both students and supervisors revealed the effect of L1 on L2 academic writing. The influence of L1 on L2, as some supervisors revealed, resulted in using long sentences with lots of details and explanation. This constituted a problem for students' supervisors because they had a difficulty in understanding what the students really mean. Sometime, the supervisor had to correct his/her students' grammatical mistakes in order to get the meanings, and this is considered time consuming. As for students, they reported the negative as well as the positive effect of L1 (Arabic language) on L2 academic writing. For instance, students translate the ideas into Arabic in order to understand the content of the sources. This might help

them digest the ideas easily. On the other hand, the negative effect of L1 on L2 resulted in using unclear ideas that are difficult to be understood by the supervisor.

Adopting a stance towards citations was also among the challenges that are faced by EFL Arab postgraduates during the proposal preparation stage. Concerning student participants, several aspects limited their ability to adopt a stance. For example, students in IT are limited by their field that is based on facts. As students pointed out, facts in IT are not argumentative. Therefore, they are not allowed to express their stance. In this regard, one of the supervisors in IT also agreed with this aspect arguing that IT is based on clarity rather than possibility. The low level of knowledge in one's research domain, lack of evaluative vocabulary that shows stance, and politeness and tension are the other reasons that affect student participants in adopting a stance towards citations. Since student participants did not use evaluative vocabulary as hedges to reveal their stance, their supervisors stated that EFL Arab postgraduates use strong claims.

Using types of citations and types of verbs in citation also represented a difficulty to EFL Arab postgraduates. Because of having limited guidelines and instructions on how to use citations, students depended on their own perceptions in using citations. For example, they believe that the integral citation is stronger than the non-integral citation because the name of the cited author can give more credibility to the cited information. This resulted in using the integral citations with a higher number of frequencies in the literature review chapters of the 20 PhD theses by EFL Arab postgraduates. Similarly, the students' supervisors showed that EFL Arab students use simple types of citations and limited range of non-academic reporting verbs that do not reveal a high level of critical thinking. These simple types of citations, as the

supervisors indicated, reflect students' lack of the depth of reading. In other words, the information cited is superficially paraphrased rather than critically digested.

Since EFL Arab postgraduates at the beginning of their PhD study lack research skills and some do not have a background about how to conduct a research, they are not aware of the quality of information published in sources. In other words, because of their low level of knowledge in their research topic, they cannot determine the credibility and reliability of the findings, particularly in some conference proceedings. Students' supervisors attributed this problem to inability to access good sources or their failure to get the correct readings. Overall, several aspects formed challenges for EFL Arab postgraduates in the process of citations in the different stages including reading, understanding, paraphrasing, writing, and integrating.

#### **4.2.8 Summary of the Chapter**

Chapter four is concerned mainly with the findings of the study. Five objectives are addressed in this chapter. Objective One presents answers for the interpersonal metafunction revealed through the clauses of the citations. Objective Two provides the findings related to the ideational metafunction of the clauses used in citations. Objective Three shows how the interpersonal and the ideational metafunction are revealed in the textual metafunction. Objective Four makes an evaluation of the citations use based on the findings obtained from the lexico-grammatical analysis in Objectives One, Two, and Three. Objective five demonstrates the challenges in using citations based on the students and their supervisors' perceptions.

## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter reviews the study in general and discusses the findings in relation with the other previous studies. It also highlights the contributions of the present study to the existing literature, and the implications for teaching and learning. In addition, it indicates the limitations of the study and suggests recommendation for further future research.

#### **5.2 Overview of the Study**

The present study aimed at identifying the use of citations in the literature review chapter of PhD theses by EFL Arab postgraduates in Information Technology and Applied Linguistics at Universiti Utara Malaysia (UUM). It is also aimed at exploring the challenges faced by EFL PhD Arab postgraduates in IT and AL in terms of citations use. The study was motivated by personal experience of the researcher during the Master's degree. In writing assignments, it was required to cite information from other sources. The process of citing the information was challenging since no clear ideas about how to cite and what to include in the cited information. In addition, the findings of previous studies which reported non-native writers' difficulties in using citations and claiming their positions constituted another factor to explore citations deeply. Such an issue can be challenging for EFL Arab students being English Foreign Language (EFL) learners who rarely used English in their home countries. Hence, using citations could be certainly perplexing for EFL Arab postgraduates in pursuing their studies which cannot be accomplished unless their L2 academic writing is accurate and appropriate. Writers of English, particularly ESL/EFL writers, are unaware of using citations. In other words, they are

not familiar with the implied evaluation in using citations, and are not sure of the appropriate stance to be adopted towards citations. In addition, non-native writers of English choose reporting verbs randomly and are not able to acquire the conventions of using citations implicitly. The contrasts in the findings of previous studies and lack of adopting a specific theory in analysing citations and reporting verbs led the researcher in the present study to address the following objectives.

- 1- To explore how the interpersonal meanings are expressed in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.
- 2- To describe how the ideational meanings are realised in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.
- 3- To identify how the textual meanings are expressed in the clauses of the citations in the literature review of EFL Arab postgraduates' PhD theses.
- 4- To evaluate the citations use by EFL PhD Arab postgraduates in the literature review of their PhD theses.
- 5- To explore the challenges faced by EFL PhD Arab postgraduates in the citation practices when writing the literature review of their PhD proposals.

Under the genre analysis of the textual approaches, two theories were adopted in analysing the citation use and practices in the literature review chapter of AL and IT. Three sources of data were used to get a full comprehension of the citations uses and practices. These included the literature review chapters of 20 PhD theses of AL and IT, nine EFL Arab postgraduates of Applied Linguistics and Information Technology, and five PhD supervisors of AL and IT. The *Systemic Functional*

*Linguistics* was adopted to understand and evaluate the citations of the literature review chapter used by EFL Arab postgraduates.

This analysis was based on three language metafunctions (interpersonal, ideational and textual) of each clause being the unit of analysis in each citation. The interpersonal metafunctions of the clause involved the mood class, the constituents of the clause and the modality expressed by EFL Arab postgraduates. The ideational metafunction is composed of two aspects: the experiential and the logical meanings. For the experiential meanings, the focus was on the *Transitivity System* that involved the processes used in each clause of the citations, the participants and the circumstantial. Regarding the logical meaning, it is concerned with the logico-semantic relations in citations with clause complexes. For the textual meanings, the analysis involved identifying the *Theme* and *Rheme* in each clause, types of *Theme*, *Marked Theme* and *Predicated Theme*. Word documents, tables and diagrams that were designed by the researcher were employed in the analysis. Thus, the qualitative analyses of the citations were enhanced by quantifying the findings in order to shed more light on the possible similarities and/or differences in using citations in the literature review chapters of AL and IT as disciplines that belong to the soft domain and the hard domain of knowledge, respectively.

Under the *New Rhetoric Studies* as another approach for analysing citations, nine EFL Arab postgraduates from AL and IT were interviewed to explore the challenges in using citations. *Discourse-Based Interviews* (DBIs) were conducted individually with seven participants, whereas the other two female participants replied to the interview questions through email for social, cultural and religious considerations.

Besides the interviews with the EFL Arab postgraduates, Discourse-Based Interviews (DBIs) were also adopted in interviewing five PhD supervisors of Applied Linguistics and Information Technology. These interviews were conducted individually face-to-face in order to explore the perspectives of the supervisors being experts in supervision on the use of citations by EFL Arab postgraduates. A hand analysis, visual mapping and mind mapping were the techniques that were used in the thematic analysis of the transcribed interviews.

### **5.3 Review of the Findings in the Present Study**

The present study involved the analysis of the clauses in the citations of the literature review chapters of PhD theses in IT and AL by EFL Arab postgraduates. It also involved interviewing EFL PhD Arab candidates and PhD supervisors in IT and AL. Thus, five research objectives were addressed in the present study.

*Research Objective One* is concerned with the interpersonal meanings that are realized through the structure of the clauses of the citations in the literature review chapters of IT and AL theses by EFL Arab postgraduates at UUM. The findings at the interpersonal meanings revealed that EFL Arab postgraduates depended mainly on using full declarative clauses in citations, whereas only one clause was used in the imperative mood. This shows the similarity in using the mood class of the clauses in the citations in the literature review chapters of AL and IT that belong to two different domains. In spite of their different domains of knowledge, the number of clauses in each citation was of an approximate percentage. This latter finding may indicate the influence of L1 on EFL Arab postgraduates' use of clauses in citations.

In other words, EFL Arab postgraduates tended to use citations with multiple clauses that resulted in long statements.

Each clause is composed of two components: MOOD and RESIDUE. The MOOD involved two constituents that are Subject and Finite, whereas the RESIDUE involved three constituents which are the Prädicator, the Complement, and the Adjunct. A distinguished aspect in the MOOD component is the role of the cited author as a Subject. AL is a soft domain that emphasizes the name of the cited author, whereas IT is a hard domain that focuses more on concepts, procedures, and facts. Therefore, the name of the cited was less used as a Subject.

As for the Finite constituent, it played a significant role in showing the positioning of EFL Arab postgraduates towards citations. This stance involved both modalisation and modulation with a stance that ranked from high, through medium to low. Since AL is a soft domain, the number of Finite was higher than IT that is classified as a hard domain.

Another distinguished aspect regarding the constituents of the RESIDUE component of the clause is the role of the cited author as a Complement. This function also contributed to the difference between the discipline of the soft domain and the discipline of the hard domain. In other words, the cited author as a Complement occurred frequently in the literature review chapters of AL, whereas it occupied a lower percentage in the literature review chapters of IT.

Adjunct is the other adverbial or prepositional constituent of the RESIDUE component of the clause. The cited author as an ‘\_Adjunct’ also occurred with a higher number of frequencies in the clauses of the citations of AL compared with the low percentage in IT. Adjuncts included Mood Adjuncts which were used to express a variety of degrees of usuality and probability in AL and IT. Comment Adjuncts were also employed to show variations in the stance that affected the whole clause. Similar to Mood Adjuncts, Comment Adjuncts were higher in the literature review of AL compared with IT.

*Research Objective Two (Part One)* is associated with the ideational metafunction which consists of two parts in which the first part is concerned with the experiential meanings, whereas the second part addresses the logical meanings of the clause complexes used in citations. This part (Transitivity System) of the ideational metafunction involved four aspects: the processes used in the clauses, the roles of the author that are associated with these processes, the Circumstantial constituents, and the role of the author as a ‘\_Circumstantial’. As for the processes used, six main types of processes were used, including material, mental, verbal, behavioural, relational, and existential. These types of processes were used in a sort of similarity in terms of their ranking from the dominant type of processes to the least used ones.

As for the roles of the cited author which are associated with types of processes, the cited author has the following roles: Sayer, Actor, Senser, Goal, Carrier, Attribute, Carrier: Possessor, Verbiage, Behavior, Phenomenon, Value, Token, and Agent: Attributor. Other significant issues related to the role of the author are the dominance of the role of the author as a ‘\_Sayer’, followed by the role of the author as an ‘\_Actor’

and a *\_\_Senser*‘ in the citation of AL. On the other hand, the role of the cited author as an *\_\_Actor*‘ dominated the citation of IT, followed by the role of the cited author as a *\_\_Sayer*‘, and a *\_\_Senser*‘. The variety in the roles of the cited author lays more emphasis on the distinctions between AL and IT as disciplines of different domains.

The circumstantial that is represented by a prepositional constituent also formed a constituent of the clause to add extra information for the clarification of the idea. These circumstantial constituents were used to refer to *extent*, *location*, *manner*, *cause*, *accompaniment*, *matter*, *role*, *agent* and other roles. The circumstantial constituents were used similarly in terms of their high occurrence to refer to *Location* in AL and IT. However, other circumstantial constituents were used with different ranks related to the number of frequencies in the citations of AL and IT. For example, circumstantial as a *„Role*“ occupied the third rank in terms of the number of frequencies in AL, whereas circumstantial as a *„Cause*“ occupied the third rank in IT.

The cited author in the present study has a variety of roles, including *Location*, *Agent*, *Matter*, *Manner (Comparison)*, *Accompaniment* and others. The role of the author as *„Location*“ had the highest number of occurrence, followed by the role of the author as an *\_\_Agent*‘ with a high percentage in AL compared with IT. On the other hand, variations also exist. For example, the role of the cited author as a *\_\_Matter*‘ had the third rank in AL, whereas the role of the author as *Manner (Comparison)* occupied the third rank in IT.

The second aspect of the ideational metafunction involved the logical meanings in clause complexes of the citations used in the literature review chapters of AL and IT.

The logical meanings deal with two concepts that are taxis and *logico-semantic relations*. Taxis is concerned with the way clauses in the clause complexes are linked to each other through either dependency (hypotactic) relations or interdependency (paratactic) relations. Regarding the logico-semantic relations, clauses are linked to each other through two main ways which are *Expansion* and *Projection*. Citations with more than two clauses involved a third type of logico-semantic relations that is a combination of *Projection* and *Expansion*.

*Expansion* is formed when non-projecting processes, such as material, behavioural, relational and existential, are used in the primary clause of a clause complex. The intra-disciplinary comparison showed the dominance of *Expansion* in the citations of IT and AL. *Expansion* was realized through three subtypes, including *Extension*, *Elaboration* and *Enhancement*. *Extension* had the highest percentage, followed by *Elaboration*, whereas *Enhancement* had the lowest percentage.

*Projection* is the second type that realizes the logico-semantic relationships. It is formed when projecting processes, such as verbal and mental, were used in the primary clause of a clause complex. The intra-disciplinary comparison illustrated that the citations of AL had a higher percentage of *Projection* compared to IT. The inter-disciplinary comparison also showed that EFL Arab postgraduates in AL used *Projection* more than IT. *Projection* was used with several varieties, including *Quoting Direct Speech*, *Reporting Indirect Speech*, *Quoting and Reporting*, *Free Indirect Speech*, and *Facts*. AL and IT were similar in using *Quoting /Reporting* with the highest percentage. *Facts* as another subtype of *Projection* was also used similarly in the citations of AL and IT in terms of the lowest number of occurrence.

On the other hand, the other subtypes of Projection were used with a variation in their number of frequencies and percentage. A combination of Projection and Expansion was also used as another type that realizes the logico-semantic relations of a clause complex. Similar to using Projection, the findings revealed that AL had a higher percentage compared with IT.

*Research Objective Three* aimed at identifying the textual meanings that are realized through the clauses of the citations in the literature review chapters of IT and AL. The clause is the unit of the analysis in this study, and each clause has a THEMATIC structure. In other words, each clause is organized in a way that communicates its message to the reader. Hence, each clause has two parts: THEME and Rheme. THEME is the point of departure of the message, whereas Rheme is the reminder of the clause. Three types of THEMES were used by EFL Arab postgraduates in the citations of AL and IT. The intra-disciplinary comparison showed that EFL Arab postgraduates in AL used the Interpersonal THEME more than the Topical THEME and the Textual THEME. On the other hand, EFL Arab postgraduates in IT had a similar use in terms of number of frequencies of Interpersonal THEME and Topical THEME, whereas the Textual THEME in Information Technology was the least used type of THEMES. Regarding the Elliptical THEME, the Structural THEME, the Predicated THEME and Marked THEME, they were used with a higher number of frequencies in AL. In spite of their different numbers of frequencies, the Author as THEME was used more than the Author as Rheme in the citations of AL and IT.

Research Objective Four is concerned with making an evaluation of the citation use by EFL Arab postgraduates in the literature review chapters of AL and IT. The

findings related to the interpersonal meanings showed that EFL PhD Arab postgraduates depended on full declarative clauses in the citations in order to communicate the concepts completely and appropriately since this communication is one way from the writer to the reader. Employing the name of the cited author as a constituent of the clause was with a higher frequency in AL. This might be appropriate since Applied Linguistics belongs to the soft domain. Also, using modality with a higher frequency in Applied Linguistics compared with IT seems appropriate. On the other hand, although IT belongs to the hard domain, the name of the cited author was also employed in order to support the credibility of the cited information. This might reveal unawareness of EFL PhD Arab postgraduates of the implied evaluation of citation.

In using modality, the 'Finite' modal operators were used more than Mood Adjuncts in the citations of AL and IT. This could be attributed to the limited knowledge of EFL PhD Arab postgraduates in using Mood Adjuncts. Hence, using a variety of these Mood Adjuncts may result in a more persuasive type of texts, particularly for disciplines in the soft domain.

Regarding the Transitivity System, using material and relational processes in the citations of IT with a higher number of frequencies is probably quite appropriate since such processes can convince the reader that the real happenings do exist. On the other hand, using these two types of processes, material and relational, with a high number of frequencies in the citations of AL could be ineffective in producing a sort of an argumentative type of texts. The overuse of the material and relational processes is a logical reason for the dominance of the Expansion as a logico-semantic

relationship of citations with clause complexes in Applied Linguistics and Information Technology. Within Expansion, Extension was heavily used. This might reveal the tendency of EFL PhD Arab postgraduates to provide their readers with much information about their research area. Another possible reason could be attributed to the strategy adopted by EFL Arab postgraduates, whereby they attempt to show their readers that they are quite familiar with their topic of study. Their limited knowledge of the Elaboration and Enhancement as other subtypes of Expansion can be a third reason for the heavy use of Extension. Hence, using clause complexes with more varieties of Expansion subtypes probably lead to a highly effective text since clarifying ideas in English is writer responsible rather than reader responsible.

EFL PhD Arab postgraduates also depended on Quoting/Reporting as a subtype of Projection. Their inappropriate use of verbal processes for reporting and mental processes for quoting can be a reason for such a use. In other words, EFL PhD Arab postgraduates possibly lack sufficient information on using subtypes of Projection. Therefore, verbal and mental processes were used interchangeably in Quoting/Reporting. Despite IT is classified under the hard domain, Facts as a subtype of Projection was used with a low number of frequencies. Hence, employing clause complexes to reveal *Facts* probably results in a highly factual text. A combination of Projection and Expansion was also used in the citations of AL and IT which resulted in long statements. This could be attributed to the effect of the Arabic language as the L1 of EFL PhD Arab postgraduates. However, using citations with long statements is ineffective since it is a feature of a conversational discourse rather than an academic genre.

Regarding the textual meanings, using the name of the cited author as a part of THEME in the citations of AL and IT possibly shows the attempt of EFL PhD Arab postgraduates to start the clause with information that is already familiar to the reader. Using the name of the cited author as THEME could be also interpreted as an attempt to convince the reader of the cited information, particularly when the cited author is an expert in the field. However, using the name of the cited author as Rheme in the citations of IT is probably inappropriate since the domain to which IT belongs focuses more on facts, and it is research prominent rather than author prominent.

*Research Objective Five* aimed at exploring the challenges of using citations faced by EFL Arab postgraduates in AL and IT theses. The findings revealed that the process of citing the information from its original sources and integrating it into the literature review chapter of EFL Postgraduates' PhD proposals posed several challenges represented by credibility of sources, adopting a stance towards citations, insufficient knowledge in using citations, paraphrasing, the effect of L1, and L2 academic writing. The interviews with the PhD supervisors of Applied Linguistics and Information Technology also revealed that EFL Arab postgraduates lack the depth of reading in their citations, have problems in using citations, and have challenges in L2 academic writing skills and adopting a position in their research studies.

#### **5.4 Discussion of the Findings**

The discussion of the findings involve several aspects associated with the clause constituents at the interpersonal metafunction, the role of the cited author under the

interpersonal and experiential metafunctions, the Transitivity System, the logico-semantic relationships, and Theme/Rheme addressed in research question one. The discussion of the findings also covers the challenges of citations faced by EFL Arab postgraduates raised in research questions two and three.

#### **5.4.1 Language Metafunctions**

The findings related to the interpersonal, ideational, and textual metafunctions are discussed in terms of comparison with the findings of previous studies. These included the clause constituents and the roles of the cited author under the interpersonal metafunction, the Transitivity System, the logico-semantic relations, and roles of the cited author under the ideational metafunction.

##### **5.4.1.1 Clause Constituents**

The clause constituents at the interpersonal metafunction showed a sort of similarity to John's (2012) study that presented a description of the linguistic structures used in citations. The similarity was mainly in using the verb and the adverb which correspond respectively to the *\_\_predicator*, and the *\_\_adjunct* in the present study. However, the linguistic structures in John's findings were limited only to the integral citations, as well as the structures that express a writer's stance such as Finite modal operators were not mentioned.

In the present study, identifying the constituents of the clause involved mood adjuncts, comments adjuncts, and finite modal operators used to communicate modalisation and modulation in both types of citations. Hyland (2005) and Hyland and Tse (2004) point out that metadiscourses that involve adverbs, such as hedges

and boosters, are used to reveal the writer's stance and establish his/her membership to a certain academic community. The high density of mood adjuncts, comments adjuncts and finite modal operators in AL compared with the low number in IT showed the effect of tenor on the interpersonal meanings (Halliday, 1985; Halliday and Martin, 1993; Eggins, 1994; Halliday and Matthiessen, 2014). In other words, each field has its own readers who expect certain expressions and vocabulary from the writers. Hence, the writers in the present study, represented by EFL Arab postgraduates, use interpersonal meanings that are consistent to the community norms in order to meet the expectations of their readers.

#### **5.4.1.2 Role of the Author**

The findings in the current study showed a diversity of the roles of the cited author. The roles were associated with two language metafunctions which are interpersonal and experiential. Swales' (2014) findings demonstrated that the author has roles as a subject, an agent, an adjunct, in NP, and others. Other findings in Hyland's (1999) study presented roles of the author as a subject, a non-subject, and in a noun-phrase. Employing the role of the author as a subject with a high number of frequencies in these two studies (Hyland, 1999; Swales, 2014) was similar to the findings of the present study. This implies that writers attempt to emphasize the role of the author regardless of their disciplinary backgrounds.

Although these two studies illustrated significant outputs, they were probably insufficient and inconsistent. For example, the two studies reported that the name of author can be a subject and in other roles, it can be a part of a noun phrase. However, the role of the subject can be also in an NP at the same time, as was showed in

Table 4.4. The function of the author as a complement‘, functions associated with the processes types, such as an actor, a goal, a sayers, a verbiage, a senser, a phenomenon, a behavior, a token, a value, a carrier, a possessor, and an agent: attributor‘, and some functions related to circumstantial, such as location, matter, manner, and accompaniment were not mentioned in Hyland (1999) and Swales (2014). Hence, the roles of the cited authors presented in the present study were more diverse, covering two language metafunctions and implied structural and functional constituents. For example, the subject‘ and complement‘ functions were realized by a nominal constituent, whereas the adjunct‘ function was realized by a prepositional constituent. Hence, the findings showed a diversity in the functional roles of the cited author that could be comprehensive as was pointed out by Jomaa and Bidin (2016).

The heavy use of the role of the cited author in AL compared with the low use in IT could probably emphasize the distinction between these two disciplines as a soft domain and a hard domain (Coffin et al., 2003; Hyland, 2006). The roles of the cited author were used with a high number of frequencies in AL and IT. This is associated with the density of the integral citations. That is to say, the integral citations were used more than the non-integral citations. Hence, the dominant use of the integral citations in the soft domain seems appropriate (Hyland, 1999). On the other hand, IT is a field of a hard domain that is considered research prominent rather than author prominent (Feak and Swales, 2009). Consequently, using the integral citation more than the non-integral citation seems contrasting to the previous studies (Hyland, 1999; Thompson, 2001, 2002; Thompson and Tribble, 2001; Swales, 2014). This could reveal EFL Arab postgraduates‘ unawareness of the implied evaluation of

using the integral citations, like the Vietnamese TESOL Master students (Nguyen and Pramoolsook, 2015).

#### **5.4.1.3 Transitivity System**

The Transitivity System encodes the experiential meanings. In other words, by describing the Transitivity pattern, it is possible to demonstrate how the field of the situation is structured (Eggins, 2004). The processes found in the clauses of the citations in the present study were similar to the previous studies in some aspects and different in others. On the one hand, material processes were similar to research verbs of the author acts, the procedural verbs of real-world category, FIND/SHOW group and the procedure verbs of the research Acts. Verbal processes were also similar to the textual verbs of the author acts, discourse activities, ARGUE group, and Discourse Acts. Similarly, mental processes correspond to the mental verbs of the author acts, cognition activities, THINK group, and Cognition Acts (Thompson and Ye, 1991; Thomas and Hawes, 1994; Francis *et al.*, 1996; Hyland, 1999). The other similarity was in employing the material processes dominantly in the clauses of the citations used in the literature review chapters of IT that is classified as a hard domain (Thomas and Hawes, 1994; Hyland, 1999). Using the relational processes with a high number of frequencies following the material processes could also emphasize more on the classification of IT as a hard domain. This demonstrates the effect of field as a register variable that influences the use of processes (Halliday, 1985; Halliday and Martin, 1993; Eggins, 1994, 2004; Halliday and Matthiessen, 2014).

As for AL, using material processes more than other types of processes could reveal that EFL Arab postgraduates lack knowledge of processes usages. Hence, their use is limited to the most common ones. EFL Arab students' dominant use of material processes is similar to the Malaysian Master students' use of research verbs in ELS program (Manan and Noor, 2014). This reveals that non-native writers of English probably do not have sufficient knowledge in using processes. As a result, verbal processes occupied the third rank in terms of their number of frequencies which contrasts with previous studies (Hyland, 1999; Nguyen and Pramoolsook, 2015). In this regard, Hyland (1999) demonstrates that articles of humanities and social science have a high number of argumentative (verbal) type of reporting verbs. As for behavioural, relational, and existential processes, they have not been focused on in the previous studies. It can be concluded that these citing behaviors of EFL Arab postgraduates are probably attributed to lacking sufficient linguistic knowledge on using processes appropriately as in Manan and Noor (2014) and Nguyen and Pramoolsook (2015).

#### **5.4.1.4 Logico-Semantic Relationships**

Citations were classified by Swales (2014) into reporting and non-reporting citations based on the categories of the denotative reporting verbs (Thompson and Ye, 1991; Thomas and Hawes, 1994; Francis *et al.*, 1996; Hyland, 1999). However, this classification was not based on a specific theory as in the present study. For example, the procedural reporting verb *'conducted'* is considered a material verb that cannot be used in projection. Hence, classifying a citation with a procedural research act as reporting is different from the findings of the present study.

Based on the SFL, only two processes, verbal and mental, are used in Projection. Therefore, citations that included these two processes in the first clause of the clause complex were classified as Projection. Projection in its turn was subcategorised into several subtypes in the present study, whereas in Swales' (2014) findings, citations were classified generally as reporting. Using Reporting/Quoting subtype predominantly could demonstrate the random use of projecting processes, verbal and mental, by EFL PhD Arab postgraduates. As for the non-reporting citations, in the present study, they were described as Expansion based on the type of process used in the primary clause of the clause complex. Material, relational, behavioural, and existential processes resulted in Expansion when used in the primary clause of the clause complex. Using Expansion more than Projection in the literature review of Information Technology corresponds to the findings of Swales (2014) in which non-reporting citations were higher than reporting ones in biology papers by undergraduate students.

Expansion in its turn was subdivided into other subtypes, including Extension, Elaboration, and Enhancement. According to Swales and Feak (2012), if the audience (supervisor(s) and examiners) know more than the student writer, the writer's purpose is to show his/her familiarity with the topic of study. This may justify the heavy use of Extension as a subtype of Expansion in citations with clause complexes. As for the combination use of Projection and Expansion in one citation, this mixed type was not included in the previous studies (Halliday, 1985; Halliday and Martin, 1993; Eggins, 2004; Halliday and Matthiessen, 2014). Using Projection and Expansion in one citation resulted in long sentences. This could probably show the effect of L1 on EFL PhD Arab postgraduates' use of citations as was

demonstrated in the influence of French language on French writers of English (Rowley-Jolivet and Carter-Thomas, 2014).

#### **5.4.1.5 THEME/Rheme**

The Textual meanings demonstrated how EFL PhD Arab postgraduates used THEME and Rheme, which were examined at the clause level rather than at the discourse level. According to Swales and Feak (2012), using new/old information can create a content connection backward and provides a forward content link that establishes the context' (p.31). However, starting the clause at the sentence level with the name of the cited author may imply that EFL Arab postgraduates are unable to make the text fully coherent through THEME/Rheme. Consequently, EFL PhD Arab postgraduates adopted the name of the cited author as a strategy considering that the reader is familiar with the name of the cited author. Hence, EFL Arab students' unfamiliarity to use this new/old information can force a student to use discourse markers and conjunctive expressions. Otherwise, students' writing will result in disconnected sentences.

#### **5.4.2 Challenges in Citation Use**

This part of the discussion sheds light on the challenges of citations faced by EFL PhD Arab postgraduates from the perspectives of EFL Arab postgraduates and their PhD supervisors. Postgraduates are considered novice writers in the context of their academic community. One of the difficulties that is faced by EFL PhD Arab candidates in using citations is to know what is considered academic and which is considered non-academic (Swales and Feak, 2012). This was commented on by one of the PhD supervisor who said that EFL Arab postgraduates use non-academic types

of verbs in citations. What complicates the process of academic writing is the disciplinary differences in the style of writing, whereby each discipline has its own style, ideology and epistemology (Hyland, 1998a; Charles, 2006b). Although PhD students in IT attended the academic writing course together with students from social sciences, these PhD students in IT lack a discipline-specific course which resulted in inappropriate use of citations. In this regard, Al-Khasawneh (2010) suggested developing specific discipline materials since EFL Arab postgraduate students at College of Business at UUM faced problems related to register vocabulary.

Sentence connectors, namely punctuation, have significant effect in creating a coherent text (Swales and Feak, 2012). However, EFL PhD Arab postgraduates reported low familiarity with using conjunctions and punctuation, particularly using the semi-colon (;). Hence, lack of knowledge in using the punctuation resulted in long statements and a less effective text. In this regard, Pecorari (2006) mentioned that students' own attempt to master the features of published texts that are considered appropriate by their academic community and the advisors' feedback (Riazi, 1997) are the two sources for learning how to write academically. However, the random use of citations types and types of processes by EFL Arab postgraduates imply that learning citations and the community norms implicitly through reading sources is not sufficient (Mansourizadeh and Ahamd, 2011; Nguyen and Pramoolsook, 2016). Hence, literacy practices should include citations to be taught and learned (Hu and Wang, 2014; Nguyen and Pramoolsook, 2016).

EFL PhD Arab postgraduates also reported difficulties in paraphrasing when citing information represented by the appropriate use of academic vocabulary and keeping the original meaning. This challenge seems to accompany non-native speaker writers of English (Qian and Krugly-Smolska, 2008; Liao and Tseng, 2010; Shi, 2012) due to their low proficiency in English and writing skills (Liu, 2005), as well as the effect of L1 on L2 academic writing (Qian and Krugly-Smolska, 2008; Pudín, Storey, Len, Swanto, Din, 2015).

EFL PhD Arab postgraduates also showed lack of knowledge in the evaluative expressions and the difficulty in adopting an attitude, particularly during the PhD proposal stage. Showing a stance towards the citations was limited to revealing methodological limitations, employing contrastive conjunctions, such as *however*, *but*, *on the other hand* and using some reporting verbs, such as *stated*, and *claimed*. Dunleavy (2003) emphasized that a thesis writer should meet the expectations of their readers since English language is *writer-responsible*. That is to say, the writer or the speaker is responsible for clarifying and organizing the concepts to make readings/speech easily understood by the readers/listeners (Hinds, 1987). One significant key to acknowledge their roles as writer responsible is through using metadiscourse (Dahl, 2004) in order to organize the text and interact with the reader. Metadiscourses are also used to reveal the academic voice which is rather challenging in English for non-native speaker writers (Shen, 1989). Lack of knowledge of the evaluative vocabulary resulted in limited use of mood adjuncts. Hence, moderating a writer's claim is fundamental which should be neither too strong nor too weak. These challenges in using citations occurred since citation competence, as Ma and Qin (2017) argue, is an inter-textual skill that involves

cognitive proficiency of source use, academic reading proficiency, academic writing proficiency, and citing motivation.

### **5.5 Conclusions Based on the Findings**

EFL Arab postgraduates used full declarative clauses in their citations of the literature review chapters of AL and IT theses. Finite, Mood Adjuncts, and Comment Adjuncts were employed to show stances of modalisation (probability/usuality) and modulation (obligation/inclination). As stated by Halliday (1985), tenor is a register variable that can affect stance. This was obvious in the high use of modality in the citations of AL compared with IT. In other words, each academic community has its own readers who expect to read or receive certain evaluative expressions.

Regarding the experiential metafunction, EFL Arab postgraduates used material, relational, verbal, mental, existential, and behavioural processes to realize the Transitivity System. As for the logical meanings, citations with clause complexes were joined hypotactically and paratactically to realize Projection, Expansion, and a combination of Projection and Expansion. According to Halliday (1985), field is a register variable that can affect the use of the Transitivity System. Although AL and IT are different fields, there was a similarity in using processes in the clauses of citations. This could reveal two issues. First, EFL Arab postgraduates are probably unaware of using processes in citations. Consequently, they used processes randomly or depended on their own perceptions. Second, there could be other variables that affected the use of processes in citations. The analysis of the textual metafunction showed that Textual, Interpersonal, and Topical THEME as well as a Predicated THEME and a Marked THEME were used in the clauses of the citations. The

evaluation aspect revealed appropriate and inappropriate use of clauses in citations in terms of the interpersonal, ideational, and textual metafunctions. The discourse-based interviews with EFL PhD Arab postgraduates resulted in challenges in citations practices, including credibility of the sources, adopting a stance, insufficient knowledge in using citations, paraphrasing, and L2 academic writing. In addition, PhD supervisors also pointed out that EFL Arab postgraduates have challenges related to citations, represented by lack of reading depth, using citations, L2 academic writing, and positioning. These (DBIs), as advocated by Hyland (2011) and Lancaster (2016), could elicit significant issues in using citations by EFL Arab postgraduates. Hence, the findings of the present study reveal obviously the mutual benefits of focusing on the text in context through SFL and the context of the text through the New Rhetoric Studies (Gardner, 2012).

## 5.6 Implications of the Study

Identifying the citation use by EFL Arab postgraduates through adopting the Systemic Functional Linguistics and exploring the challenges in citations practices through the *New Rhetoric Studies* resulted in significant findings that have theoretical and pedagogical implications. Theoretically, applying the Systemic Functional Linguistics in analysing the clauses used in the citations resulted in significant findings that cover the three language metafunctions: Interpersonal, Ideational, and Textual. Each language metafunction that was adopted in analysing the clause had implications. For example, adopting the Systemic Functional Linguistics in analysing the citations presented a comprehensive demonstration of the role of the cited author. This involved the role of the cited author as a *Subject*, a *Complement*, and an *Adjunct* under the Interpersonal Meanings.

Under the Experiential Meanings, the role of the cited author was associated with the types of the processes used in each clause of the citations. Thus it involved the cited author as an *Actor*, a *Goal*, a *Senser*, a *Phenomenon*, a *Sayer*, a *Verbiage*, a *Behaver*, a *Carrier*, an *Attribute*, a *Token*, a *Value*, a *Possessor*, and an *Agent: Attributor*. The cited author also played the role of the *Circumstantial* that involved a *Location*, a *Manner*, an *Accompaniment*, a *Matter*, a *Role*, an *Agent*, and other roles. For the Textual Meanings, the cited author has the role of either *Theme* when used as the Topical Theme or the role of the *Rheme* when used in the remainder of the clause.

The logico-semantic relationship is basically significant in describing the relationships between the clauses of the clause complexes used in the citations. However, the taxonomy presented by Systemic Functional Linguistics focused only on the logico-semantic relations between clause complexes that are composed of two clauses only in one citation. For EFL Arab postgraduates, using more than two clauses in one citation occurred frequently in the literature review chapters of IT and AL PhD theses. Consequently, an extension of the taxonomy was presented in the findings of the present study in order to describe the logico-semantic relationships between clauses of citations with more than two clauses. This involved a combination of Projection and Expansion in one citation.

It was also possible for the processes used in the clause complexes of the citations to be re-categorized based on their roles. *Verbal* processes, such as *claim*, *state*, *demonstrate*, *report*,...and *mental* processes, such as *believe*, *think*, *feel*, *see*,... can be classified as *Projecting* processes which are used in the projecting clauses of the

clause complexes. On the other hand, *Material* processes, such as *analyse, conduct, use, adopt,....behavioral* processes, such as *observe, behave, watch,....relational* processes, such as *is, are, was, were, has, have,....causative* processes, such as *make, cause, evoke,...* and *existential* processes in the structures *“There is”, “There are”....* can be classified as *Non-Projecting* processes. Hence, the proposed taxonomy, *Projecting* and *Non-Projecting* processes, can be used in analysing the logico-semantic relationships of citations with clause complexes.

Pedagogically, the findings of the present study probably have significant implications revealing students' insufficient knowledge in using citations including modality, types of citations, types of processes and challenges in citing the information from the sources and integrating it into their own writings. Though the Academic Writing and the Research Methodology courses presented valuable information to the students at the beginning of their Masters or PhD study, these two courses focused more on writing essays, and the structures of proposals, dissertations and theses. Hence, the students still lack sufficient information about citation use. In using citations, students depended only on their supervisors' feedback and the style of the PhD theses of other previous students and the articles they read. In addition, the guidelines about using citations that students received focused mainly on using author/date referencing style. However, students at UUM in IT use Vancouver (Numbering) system in citation. In this aspect, Coffin *et al.* (2003, p.3) argue:

*Student academic writing continues to be at the centre of teaching and learning in higher education, but is often an invisible dimension of the curriculum; that is, the rules or conventions governing what counts as academic writing are often assumed to be part of the „common sense“ knowledge students have, and are thus not explicitly taught within disciplinary courses.*

Teaching L2 composition has ignored teaching L2 students how to create arguments at the appropriate time (Bloch, 2010). Even the study conducted by Bloch (2010) for pedagogical purposes was limited to only few reporting verbs:

*„It is difficult, if not impossible, to create a representative sample of how reporting verbs are used in a way that could reflect all the uses for reporting verbs...Therefore, discussions on how to make negative evaluations are necessary in an L2 writing” (pp. 240-241).*

Academic English proficiency is considered vital to achieve the academic success by ELLs (August and Hakuta, 1997; August and Shanahan, 2006). However, the recent instructional practices taught to ELLs have not been effective in improving their language skills, as evidenced through the gap achieved by ELLs compared with native speakers (Aguirre-Muñoz, Park, Amabisca, and Boscardin, 2009). Researchers argue that the low achievement in students' academic writing is attributed to lack of explicit instructional focus on teaching academic language (Gibbons, 2002, 2003).

English for Academic Purposes materials present the possibility of increasing our understanding of the variety in language use in different academic communities in order to introduce highly strong foundations for pedagogic purposes (Hyland and Hamp-Lyons, 2002). ESP researchers can explore the applicability of learning theories from SFL and NR to ESP (Cheng, 2006). For example, a typical ESP genre-based writing class directed towards non-native speakers and novice writers could lead students from different disciplines to explore the genre specific features and the disciplinary practices used in research articles, dissertations or PhD theses. EFLs can be also engaged in a discipline-specific writing task. Such focuses and practices

could be considered an effective tool that the learners need in order to develop their L2 academic writing (Cheng, 2006).

One approach to academic language is influenced by a genre-based literacy program (e.g., Christie, 1992, 1999; Martin and Rose, 2005) that is grounded in SFL (Halliday, 1985; Halliday and Matthiessen, 2014). Genre-based pedagogy supports explicitly teaching academic registers that students need. Particularly, it consist of teaching linguistic features employed in specific academic genres that students are usually involved in (Aguirre-Muñoz, Park, Amabisca, and Boscardin, 2009).

The increasing number of learners of English for Academic Purposes has led to a similar expansion in the number of EAP teachers. The majority of the teachers of EAP around the world are non-native speakers of English. The non-native teachers' needs are different from the native speakers' ones. Consequently, this recognition has resulted in new developments in EAP materials and teacher training courses. (Hyland and Hamp-Lyons, 2002). This raises the need to train teachers and instructors and equip them with the grammatical elements that constitute academic language in order to cope with the challenges faced by non-native speakers in writing academically (Aguirre-Muñoz, Park, Amabisca, and Boscardin, 2009). Training teachers to teach citations explicitly can be achieved through several stages. Considering the three register variables (field, tenor, and mode) that can affect the use of language, teachers can be trained on the three language metafunctions (ideational, interpersonal, and textual) that are associated with these three register variables, respectively. These teachers in their turn can guide students to apply the instructions derived from SFL in their writing tasks.

For example, at the interpersonal metafunction, students can be taught how to use clauses based on the register and how to show their stance by means of the Finite modal operators, mood adjuncts, and comments adjuncts. Students can be also taught the constituents that make a clause. In this regard, students will learn which constituents are primary or basic and which ones are secondary or not essential. In addition, they can be taught which constituents are movable. This later aspect can help students how to make diversity in their linguistic performance. Similarly, at the ideational metafunction, students can be taught the types of processes used in each clause and the participants involved with each process. Students could probably learn how to create sentences in general and citations in specific with clause complexes employing expansion and projection with their various subcategories and the implication of each subcategory. Thematic structure involving Theme and Rheme can be also an effective tool when used appropriately by students. This thematic structure is taught at the last stage since it involves both the ideational and interpersonal metafunctions. Hence, utilizing the SFL approach to academic language entails deconstructing the linguistic features and structures in order to make the linguistic expectations of the academic language explicit and discernible to the instructors and students.

Therefore, the two courses, Academic Writing and Research Methodology that are taught to the students, should include more information about using citations. Swales' (1990, 2014) findings, Thompson and Tribble's (2001) taxonomy, Hyland's (1999) taxonomy, and the findings in the present study can be significantly beneficial for students when included in the academic writing course and research methodology and be taught to students before starting their academic study. The findings of the

present study are based on analysing the text in context and the practices of the student writers. Thus, such outputs are quite applicable to be used in English for Academic Purposes (EAP) teaching as was reported by Gardner (2012).

### **5.7 Strengths of the Study**

The present study shed light on the citations use and practices and the challenges faced by EFL Arab postgraduates in writing the literature review chapters of their PhD proposals. The previous studies presented findings related to the citation practices, in which two taxonomies were frequently adopted by the researchers in these studies. These involved Swales' (1990) integral/non-integral taxonomy and Thompson and Tribble's (2001) Verb controlling, Naming, and Non Citation taxonomy. The studies that employed these two taxonomies resulted in contrasting findings without identifying the real reasons behind the students' performance. In addition, these two taxonomies did not cover the citations practices of the students comprehensively. Moreover, the studies that focused on reporting verbs used in citations have not focused on some verbs and did not depend on a theory when categorizing these verbs. Furthermore, other qualitative studies included interviews and discourse-based interviews that focused only on the functions and purposes of the citations.

One of the strengths in the present study is adopting three language metafunctions in analysing the clauses of the citations in the literature review chapters of IT and AL PhD theses in the present study. These three language metafunctions are the interpersonal meanings, the ideational meanings, and the textual meanings. The interpersonal meanings focused on the mood of the clauses, the functional role of the

cited author and the modality. This objective filled the deficiencies in the previous studies related to the functional role of the cited author under the interpersonal meanings, the mood of the clauses in the citation types, the constituents of each clause of the citations, and the attitude adopted by the writer towards the citations.

The ideational meanings were of two parts: the experiential meaning and the logical one. The experiential meanings identified all types of processes used in each clause of the citations. Thus, it presented a comprehensive taxonomy of all processes used in the citations. It also involved the role of the cited author under the experiential meanings and the constituents of the clause in each citation. The logical meanings are the second aspect of the ideational meanings which focused on the logico-semantic relationships between clauses of clause complexes of the citations. Hence, two significant issues resulted in the present study. The first issue is related to the relationships between clauses of citations with clause complexes, which included Projection, Expansion and a mixed type of Projection and Expansion. Instead of describing the citations as reporting or non-reporting as in Swales' (2014) findings, such a proposed classification can give a comprehensive picture of the logico-semantic relationships between clauses of clause complexes used in citations. The other associated issue is reclassifying the processes in the clause complex into two types: the projecting processes and the non-projecting ones. The projecting processes involved verbal and mental processes, whereas material, relational, existential, and behavioural processes are classified as non-projecting processes.

The other strength is adopting the *New Rhetoric Studies* to explore the context of the text. Discourse-based interviews were conducted with EFL Arab postgraduates and

PhD supervisors in order to explore the challenges faced by the students in the process of citing the information from the different sources and integrating it into their writing. This was not limited only to using the citation types; rather it was extended to include the varied stages in citing the information, such as reading, paraphrasing, integrating and writing.

Thus the present study involved two theories: The Systemic Functional Linguistics Approach and the New Rhetoric Studies. The first focused on analysing the text within the context, whereas the latter used ethnographic rather than linguistic methods for analysing the texts in order to present a thick description of the academic context. Applying these two theories and the detailed descriptions of the clauses used in the integral and non-integral citations through three language metafunctions formed another strength of the present study.

### **5.8 Limitations of the Study**

The present study involved studying citations use and perceptions only in PhD theses by EFL Arab postgraduates that are not applicable to other EFL writers from non-Arab countries. Nevertheless, the findings could present a relatively clear picture of how non-native speaker writers of English, particularly EFL writers use citations and their perceptions towards using citations.

The citations that were analysed in the present study are limited only to the literature review chapters of AL and IT. Consequently, the citations used in other sub-genres such as the introduction, the methodology and the discussion and the citation used in other disciplines such as social science are not included in the present study.

Nonetheless, the literature review represents the most significant part of PhD theses that depends mostly on citing previous studies. Hence, analysing the citations in the literature review chapter and exploring students' challenges in citations probably covers a wide aspect of citations since these PhD theses belong to two different domains of knowledge.

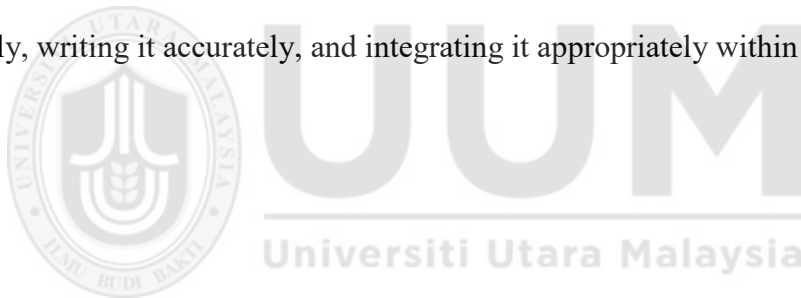
Since the interviews were based on several criteria, a limited number of participants was involved. Nonetheless, the detailed retrospective interviews with EFL PhD Arab postgraduates and PhD supervisors could present rich information about the challenges of citations faced by EFL PhD Arab postgraduates in writing the literature review chapter of their PhD proposals.

## **5.9 Recommendations for Future Research**

The lexico-grammatical analysis was adopted in analysing the clauses of the citations in the literature review chapter of PhD theses by EFL Arab postgraduates. Therefore, further studies can be conducted on other sections of the theses such as the introduction or other genres by ESL or native speakers of English in order to present more outputs about the citations use. Other possible studies can be conducted on the paraphrased citations through using the Textual Meanings. This can involve comparing the paraphrased citations. This might highlight how students paraphrase and what constituents are added to the original citations. Conducting an experimental study on students can be also another possible recommendation for further studies. This may involve two groups: a control group and an experimental group that receives guidelines and instructions on using citations. Modality in the citations was explored in the present study, but it needs more focus. Therefore, exploring modality

in the genres of research articles or PhD theses may present detailed findings about students' attitude towards the citations. This could involve exploring the cultural aspect that may motivate or prevent the student writers in the process of evaluating other researchers' studies.

Sewing clothes is a craft that attaches objects by means of stitches using a needle and thread. The whole process needs a careful selection of the needle and the thread in order to obtain correct stitches. If any of these stitches is loose, the process of sewing will result in a low quality product. Similar to the process of sewing clothes, the citation process in academic writing needs accessing good sources of information, reading relevant studies deeply, carefully and critically, citing the information honestly, writing it accurately, and integrating it appropriately within the context.



## REFERENCES

- Al-Khasawneh, F. M. S. (2010). Writing for academic purposes: Problems faced by Arab postgraduate students of the college of business, UUM. *ESP World*, 9(2), 1-23.
- Al-Zubaidi, K. O. (2012). The academic writing of Arab postgraduate students: Discussing the main language issues. *Procedia-Social and Behavioral Sciences*, 66, 46-52.
- Aguirre-Muñoz, Z., Park, J. E., Amabisca, A., & Boscardin, C. K. (2009). Developing teacher capacity for serving ELLs' writing instructional needs: A case for systemic functional linguistics. *Bilingual research journal*, 31(1-2), 295-322.
- American Psychological Association. (2010). *Publication manual of the American psychological association* (6th ed.). Washington, DC: Author.
- Andrade, M. S. (2006). International Students in English-speaking Universities: Adjustment factors. *Journal of Research in International Education*. 5(2), 131–154.
- Arkoudis, S., & Tran, L. (2010). Writing blah, blah, blah: Lecturers' approaches and challenges in supporting international students. *International Journal of Teaching and Learning in Higher Education*, 22(2), 169-178.
- Atkinson, D. and Curtis, A. (1998). *A Handbook for postgraduate researchers*. Hong Kong: Department of English, Hong Kong Polytechnic University.
- August, D., & Hakuta, K. (1997). *Improving schooling for language-minority children: A research agenda*. National Research Council Committee on Developing a Research Agenda on the Education of Limited-English Proficient and Bilingual Students. Washington, DC: National Academy Press.
- August, D., & Shanahan, T. (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Azlan, N.M.N.I. (2013). Citation typologies and rhetorical functions of citations in Master dissertations. *Journal of Creative Practice in Language Learning and Teaching (CPLT)*, 1(2), 61-74
- Bailey, S. (2011). *Academic writing: A Handbook for international students*. (3<sup>rd</sup> edition). London: Routledge.
- Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison WI: University of Wisconsin Press.

- Bazerman, C. (1994). Systems of genres and the enactment of social intentions. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79–101). London: Taylor and Francis.
- Becher, T., & Trowler, P. (2001). *Academic tribes and territories* (2nd ed.). Buckingham: The Society for Research into Higher Education and Open University Press.
- Bhatia, V.K. (1993). *Analysing genre: Language use in professional settings*. London: Longman.
- Bloch, J. (2009). The design of an online concordancing program for teaching about reporting verbs. *Language Learning & Technology*, 13(1), 59–78.
- Bloch, J. (2010). A concordance-based study of the use of reporting verbs as rhetorical devices in academic papers. *Journal of Writing Research*, 2(2), 219–244.
- Blommaert, J. (2005). *Discourse. A Critical introduction*. Cambridge: Cambridge University Press.
- Borneo Post online. (2015). *Malaysia ranked world's 9<sup>th</sup> for international students*. Retrieved from <http://www.theborneopost.com/2015/02/15/malaysia-ranked-worlds-9th-for-international-students/>
- Bouville, M. (2008). Plagiarism: Words and ideas. *Science and Engineering Ethics*, 14, 311–322.
- Bruce, I. (2008). *Academic writing and genre: A Systematic analysis*. London, GBR: Continuum International Publishing. Retrieved from <http://www.ebrary.com>
- Buzan, T. (1993). *The Mind Map Book*. London: BBC Books.
- Charles, M. (2006a). Phraseological patterns in reporting clauses used in citation : A corpus-based study of theses in two disciplines. *English for Specific Purposes*, 25, 310–331.
- Charles, M. (2006b). The construction of stance in reporting clauses: A Cross-disciplinary study of theses. *Applied Linguistics*, 27(3), 492–518.
- Cheng, A. (2006). Understanding learners and learning in ESP genre-based writing instruction. *English for Specific Purposes*, 25(1), 76–89.
- Christie, F. (1992) Literacy in Australia. *ARAL*, 12, 142–155.
- Christie, F. (1999). Genre theory and ESL teaching: A systemic functional perspective. *TESOL Quarterly*, 33(4), 759–764.
- Coffin, C., Curry, M. J., Goodman, S., Hewings, A., Lillis, T.M., & Swann, J. (2003). *Teaching academic writing*. Routledge.

- Coffin, C., & Donohue, J. P. (2012). Academic literacies and systemic functional linguistics: How do they relate? *Journal of English for Academic Purposes*, 11(1), 64-75.
- Cohen, L., Manion, L., & Morrison, K. R. (2007). *Research methods in education* (6th ed.). London: Routledge Falmer.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, US: Sage Publications.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2<sup>nd</sup> Edition). UK, London: Sage Publications.
- Creswell, J.W. (2008). *Educational research: planning, conducting and evaluating quantitative and qualitative research*. (3rd Edition). USA, Boston: Pearson Education.
- Creswell, J.W. (2012). *Educational research: planning, conducting and evaluating quantitative and qualitative research*. (4<sup>th</sup> Edition). USA, Boston: Pearson Education.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.
- Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in persuasive writing a study of texts written by American and Finnish university students. *Written Communication*, 10(1), 39-71.
- Dahl, T. (2004). Textual metadiscourse in research articles: a marker of national culture or of academic discipline? *Journal of Pragmatics*, 36, 1807– 1825.
- Dong, Y. R. (1998). Non-native graduate students' thesis/dissertation writing in science: Self-reports by students and their advisors from two US institutions. *English for Specific Purposes*, 17(4), 369-390.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies*. England: Oxford University Press.
- Dudley-Evans, T. (1989). An outline of the value of genre analysis in LSP work. In C. Lauren & M. Nordman (Eds.), *Special language: from humans thinking to thinking machines* (PP.72-79). Clevedon: Multilingual Matters.
- Dudley-Evans, T. (1994). Genre analysis: An approach to text analysis in ESP. In M. Coulthard (Ed.), *Advances in written text analysis* (pp.219-228). London: Routledge.

- Dunleavy, P. (2003). *Authoring a PhD: how to plan, draft, write and finish a doctoral thesis or dissertation*. Hampshire, UK: Palgrave Macmillan.
- Eggins, S. (1994). *An Introduction to systemic functional linguistic*. London: Pinter.
- Eggins, S. (2004). *Introduction to systemic functional linguistics*. London: Continuum International Publishing Group.
- Eggins, S. & Martin, J.R. (1997). Genres and registers of discourse. In van Dijk, T.A. (Ed.) *Discourse Studies: A Multidisciplinary Introduction*. Vol.1 (Discourse as Structure and Process) (pp.230-256). London: SAGE.
- Fairclough, N. (1989). *Language and power*. London: Longman.
- Feak, C., & Swales, J. (2009). *Telling a research story: Writing a literature review*. Ann Arbor, MI: The University of Michigan Press.
- Ferguson, G., Pérez-llantada, C., & Plo, R. (2011). English as an international language of scientific publication: A study of attitudes. *World Englishes*, 30(1), 41-59.
- Flowerdew, J. (1999). Problems in writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing*, 8(3), 243-264.
- Francis, G., Hunston, S., & Manning, E. (1996). *Collins COBUILD grammar patterns 1: Verbs*. London: HarperCollins.
- Gardner, S. (2012). Genres and registers of student report writing: An SFL perspective on texts and practices. *Journal of English for Academic Purposes*, 11(1), 52–63. doi:10.1016/j.jeap.2011.11.002.
- Gay, L. R. (1996). *Educational research: Competencies for analysis and application* (5th ed.). New Jersey: Prentice Hall.
- Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom*. Portsmouth, NH: Heinemann.
- Gibbons, P. (2003). Mediating language learning; Teacher interactions with ESL students in a content-based classroom. *TESOL Quarterly*, 37(2), 247–273.
- Gillaerts, P., & Van de Velde, F. (2010). Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes*, 9, 128-139.
- Gledhill, C. (1996). Science as a collocation: Phraseology in cancer research articles. In S. Botley et al. (Eds.), *Proceedings of teaching and language corpora conference 1996 UCREL* (Vol. 9, pp. 108-126), University of Lancaster, UK.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597–607.

- Gol, A. K., Hezareh, B. G., & Soghondikolaei, E. M. (2014). A Contrastive Study of Rhetorical Functions of Citation in Iranian and International ELT Scopus Journals. *Linguistics and Literature Studies*, 2(6), 155–165.
- Habermas, J. (1971). *Knowledge and Human Interests*. Boston: Beacon Press.
- Halliday, M.A.K. (1978). *Language as a Social Semiotic*. London: Edward Arnold.
- Halliday, M.A.K. (1985). *An introduction to functional grammar*. London: Edward Arnold.
- Halliday, M.A.K. (1994). *An introduction to functional grammar*. (2<sup>nd</sup> Edition). London: Edward Arnold.
- Halliday, M. & Hasan, R. (1985). *Language, context, and text: aspects of language in a social semiotic perspective*. Victoria: Deakin University Press.
- Halliday, M. & Hasan, R. (1989). *Language, context, and text: aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press.
- Halliday, M., Matthiessen, C. M. (2014). *An introduction to functional grammar (4<sup>th</sup> Edition)*. UK: Routledge.
- Halliday, M. A. K., & Martin, J. R. (1993). *Writing science: Literacy and discursive power*. London: The Falmer Press.
- Halliday, M. & Webster, J. J. (Eds.). (2009). *Continuum companion to systemic functional linguistics*. London, GBR: Continuum International Publishing. Retrieved from <http://www.ebrary.com>.
- Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination*. Sage.
- Hart, C. (2001). *Doing a literature search: a comprehensive guide for the social sciences*. Sage.
- Hartley, J. (2008). *Academic writing and publishing: A practical handbook*. New York: Routledge Taylor & Francis Group.
- Harwood, N. (2009). An interview-based study of the functions of citations in academic writing across two disciplines. *Journal of Pragmatics*, 41(3), 497–518. doi:10.1016/j.pragma.2008.06.001.
- Hesse-Biber, S. N., & Leavy, P. (2006). *The practice of qualitative research*. Thousand Oaks: Sage Publication.
- Hewings, A., Lillis, T., & Vladimirou, D. (2010). Who ‘s citing whose writings? A corpus based study of citations as interpersonal resource in English medium national and English medium international journals. *Journal of English for Academic Purposes*, 9(2), 102–115. doi:10.1016/j.jeap.2010.02.005.

- Hinds, J. (1987). Reader versus writer responsibility: A new typology. In U. Connor & R. Kaplan (Eds.), *Writing across languages: Analysis of L2 Text* (pp. 141-152). Reading, MA: Addison-Wesley.
- Holmes, J. (1982). Expressing doubt and certainty in English. *RELJ Journal*, 13(2), 9-28.
- Holmes, J. (1988). Doubt and certainty in ESL textbooks. *Applied Linguistics*, 9(1), 21-44.
- Hu, G., & Wang, G. (2014). Disciplinary and ethnolinguistic influences on citation in research articles. *Journal of English for Academic Purposes*, 14, 14-28.
- Hunston, S. (1993). Evaluation and ideology in scientific writing. In M. Ghadessy (Ed.), *Register Analysis: Theory and Practice* (pp.57-73). London: Pinter.
- Hunston, S. & Thompson, G. (Eds.). (2000). *Evaluation in text: Authorial stance and the construction of discourse*. UK: Oxford University Press.
- Hyland, K. (1998a). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of Pragmatics*, 30, 437-455.
- Hyland, K. (1998b). *Hedging in scientific research articles*. Amsterdam: John Benjamins.
- Hyland, K. (1999). Academic attribution: citation and the construction of disciplinary knowledge. *Journal of Applied Linguistics*, 20(3), 341-367.
- Hyland, K. (2002a). Directives: Argument and engagement in academic writing. *Journal of Applied Linguistics*, 23(2), 215-239.
- Hyland, K. (2002b). Authority and invisibility: Authorial identity in academic writing. *Journal of pragmatics*, 34, 1091-1112.
- Hyland, K. (2005). *Metadiscourse: Interactions in writing*. London: Continuum.
- Hyland, K. (2006). *English for Academic Purposes: an advanced resource book*. UK: Routledge.
- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16, 148-164.
- Hyland, K. (2008). Genre and academic writing in the disciplines. *Language Teaching*, 41(4), 543-562.
- Hyland, K. (2009a). Writing in the disciplines: Research evidence for specificity. *Taiwan International ESP Journal*, 1(1), 5-22.
- Hyland, K. (2009b). *Academic Discourse: English in a Global Context*. London and New York: Continuum International Publishing Group.

- Hyland, K. (2011). Writing in the university: education, knowledge and reputation. *Language Teaching*, pp.1-18.
- Hyland, K. (2013). *Disciplinary discourses: Social interactions in academic writing*. Ann Arbor, MI, USA: University of Michigan Press. Retrieved from <http://www.ebrary.com>
- Hyland, K.(1994). Hedging in academic writing and EAP textbooks. *English for Specific Purposes*, 13(3), 239–256.
- Hyland, K. (2016). Methods and methodologies in second language writing research, *System*, 59, 116-125.
- Hyland, K., & Hamp-Lyons, L. (2002). EAP: Issues and directions. *Journal of English for academic purposes*, 1(1), 1-12.
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: a reappraisal. *Applied Linguistics*, 25(2), 156-177.
- Hyland, K. & Tse, P. (2007). Is there an –academic vocabulary”? *TESOL QUARTERLY*, 41(2), 235-253.
- Hyon, S. (1996). Genre in three traditions: implications for ESL. *TESOL Quarterly*, 30(4), 693–722.
- Ibrahim, N., & Nambiar, R. (2011). Writing in foreign lands: The case of postgraduate international students and the introductory sections of a project paper. *Procedia – Social and Behavioral Sciences*, 18, 626-632.
- Irvin, L. L. (2010). What is –academic” writing? *Writing spaces: Readings on writing*. Vol. (1). Parlor Press.
- Israel, M., & Hay, I. (2006). *Research Ethics for Social Scientists*. Sage.
- Ivanic, R. (1998). *Studies in written language and literacy, Volume 5: Writing and identity: The discorsal construction of identity in academic writing*. Amsterdam, NLD: John Benjamins Publishing Company. Retrieved from <http://www.ebrary.com>
- Jalilifar, A. & Dabbi, R. (2012). Citation in applied linguistics: Analysis of introduction sections of Iranian master theses. *Linguistik online*, 57(7), 91-104.
- John, S. (2012). Identity without the ‘I’: A Study of citation sequences and writer identity in literature review sections of dissertations. In R. Tang, (Ed.) (2012). *Academic writing in a second or foreign language: Issues and challenges facing esl/efl academic writers in higher education contexts*. London: Continuum.

- Jomaa, N. J., & Bidin, S. J. (2016). Roles of the cited author in citations of the literature review by EFL postgraduates. *International Journal of Applied Linguistics and English Literature*, 5(7), 213-225.
- Kachru, B.B. (1990). World Englishes and applied linguistics. *World Englishes*, 9(1), 3-20.
- Kachru, Y., & Smith, L. E. (2008). *Cultures, contexts, and world Englishes*. Routledge.
- Kelle U (2004). Computer-assisted qualitative data analysis. In C. Seale, G. Gobo, J. F. Gubrium, and D. Silverman (Eds.), *Qualitative Research Practice* (pp. 473–489). London: Sage.
- Kennedy, G. (1998). *An introduction to corpus linguistics*. London: Longman.
- Lancaster, Z. (2016). Using corpus results to guide the discourse-based interview: A study of one student's awareness of stance in academic writing in philosophy. *Journal of Writing Research*, 8(1), 119-148.
- Lang, H.L. (2004). *The use of reporting verbs in literature reviews of Taiwanese postgraduate business students*. (Unpublished doctoral thesis.) University of Manchester, UK.
- Law, L., Ting, S.-H & Jerome, C. (2013). Cognitive dissonance in dealing with plagiarism in academic writing. *The 9<sup>th</sup> International Conference on Cognitive Science: Procedia - Social and Behavioral Sciences*, 97, 278–284.
- Leech, N. L., & Onwuegbuzie, A.J. (2007). An array of qualitative data analysis tools: A call for data analysis triangulation. *School Psychology Quarterly*, 22(4), 557-584.
- Liao, M., & Tseng, C. (2010). Students' behaviors and views of paraphrasing and inappropriate textual borrowing in an EFL academic setting. *Pan-Pacific Association of Applied Linguistics*, 14(2), 187–211.
- Lillis, T. (2001). *Student writing: Access, regulation, desire*. Routledge.
- Lillis, T. (2008). Ethnography as method, methodology, and 'deep theorizing': closing the gap between text and context in academic writing research. *Written Communication*, 25(3), 353–388.
- Lillis, T., & Scott, M. (2007). Defining academic literacies research: Issues of epistemology, ideology and strategy. *Journal of applied linguistics*, 4(1), 5-32.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.
- Liu, D. (2005). Plagiarism in ESOL students: Is cultural conditioning truly the major culprit. *ELT journal*, 59(3), 234-241.

- Loi, Ch. K. (2010). Research article introductions in Chinese and English: A comparative genre-based study. *Journal of English for Academic Purposes*, 9, 267–279.
- Luzón, M. J. (2015). An Analysis of the citation practices of undergraduate Spanish students. *Journal of Academic Writing*, 5(1), 52–64.
- Ma, R., & Qin, X. (2017). Individual factors influencing citation competence in L2 academic writing. *Journal of Quantitative Linguistics*, 24(2-3), 213-240.
- MacDonald, S. P. (1987). Problem definition in academic writing. *College English*, 49(3), 315-331.
- Mackey, A. & Gass, S.M. (2005). *Second Language Research: Methodology and Design*. London: LEA.
- Manan, N. A., & Noor, N. M. (2014). Analysis of reporting verbs in master's theses. ICLALIS 2013, *Procedia - Social and Behavioral Sciences*, 134, 140–145.
- Manan, N. A., & Noor, N. M. (2015). The use of integral citations in master's degree theses. *International Journal of Education and Research*, 3(7), 233–246.
- Manjet, M. K. S. (2016). An emic perspective on academic writing difficulties among international graduate students in Malaysia. *GEMA Online® Journal of Language Studies*, 16(3), 83-97.
- Mansourizadeh, K., & Ahmad, U. K. (2011). Citation practices among non-native expert and novice scientific writers. *Journal of English for Academic Purposes*, 10, 152–161.
- Maroko, G. M. (2013). Learning about author positioning in written academic discourse. *Argentinian Journal of Applied Linguistics*, 1(2), 47–60.
- Martin, J.R. (1992). *English text: System and structure*. Philadelphia; Amsterdam: John Benjamins.
- Martin, J. R. (1996). *Working with functional grammar: A Workbook*. Arnold.
- Martin, J. R. (2000). 'Beyond exchange: appraisal systems in English'. In S. Hunston & G. Thompson (Eds), *Evaluation in text. Authorial stance and the construction of discourse*. (pp.75-142). UK: Oxford University Press.
- Martin, J.R., & Rose, D. (2008). *Genre relations: Mapping culture*. UK: Equinox.
- Maxwell, J. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), 279–300. <http://doi.org/0017-8055>
- Maxwell, J. (2010). Using numbers in qualitative research. *Qualitative Inquiry*, 16(6), 474-482.

- Miller, C. (1984). 'Genre as social action'. *Quarterly Journal of Speech*, 70, 151-176.
- Moessner, L. (2001). Genre, text type, style, register: A terminological maze? *European Journal of English Studies*, 5(2), 131-138.
- Monreal, C. S., & Salom, L. G. (2011). A cross-language study on citation practice in PhD theses. *International Journal of English Studies*, 11(2), 53-75.
- Morton, J., Storch, N., & Thompson, C. (2015). What our students tell us: Perceptions of three multilingual students on their academic writing in first year. *Journal of Second Language Writing*, 30, 1-13. <http://doi.org/10.1016/j.jslw.2015.06.007>
- Murray, R., & Moore, S. (2006). *Handbook of academic writing: A Fresh approach*. Buckingham, GBR: McGraw-Hill Education. Retrieved from <http://www.ebrary.com>
- Nguyen, T. T. L., & Pramoolsook, I. (2015). Citation in Vietnamese TESOL: Analysis of master's thesis introduction chapters. *The Asian ESP Journal*, 2(1), 95-184.
- Nguyen, T. T. L., & Pramoolsook, I. (2016). Reporting verbs in literature review chapters of Tesol Master 'S theses written by Vietnamese postgraduates. *GEMA Online Journal of Language Studies*, 16(2), 17-32.
- Odell, L., & Goswami, D. (1982). Writing in a non-academic setting. *Research in the Teaching of English*, 16(3), 201-223.
- Odell, L., Goswami, D., & Herrington, A. (1983). The discourse-based interview: A procedure for exploring the tacit knowledge of writers in nonacademic settings. In P. Mosenthal, L. Tamor, & S. A. Walmsley (Eds.), *Research on writing* (pp. 221-236). New York: Longman.
- Oskueia, M. H. H., & Kuhi, D. (2014). The use of citations in academic writing: Analysis of introduction sections of Iranian and native English master's theses. *Journal of Social Issues & Humanities*, 2(3), 216-220.
- Okamura, A. (2008). Citation forms in scientific texts: Similarities and differences in L1 and L2 professional writing. *Nordic Journal of English Studies*, 7(3), 61-81.
- Paltridge, B. (1997). Thesis and dissertation writing: Preparing ESL students for research. *English for Specific Purposes*, 16(1), 61-70.
- Paltridge, B., & Starfield, S. (2007). *Thesis and dissertation writing in a second language: A handbook for supervisors*. Routledge.
- Parkinson, J. (2013). Adopting academic values: Student use of that-complement clauses in academic writing. *System*, 41, 428-442.

- Parry, S. (1998). Disciplinary differences in doctoral theses. *Higher Education*, 36(3), 273-299.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Sage.
- Patton, M. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34(5Pt2), 1189–1208.
- Pecorari, D. (2006). Visible and occluded citation features in postgraduate second-language writing. *English for Specific Purposes*, 25, 4–29.
- Pecorari, D. (2008). *Academic writing and plagiarism: A linguistic analysis*. London: Continuum.
- Peters, R. B. (1997). *Getting what you came for* (Revised Edition). New York: Farrar, Strauss and Giroux.
- Petrić, B. (2007). Rhetorical functions of citations in high- and low-rated master's theses. *Journal of English for Academic Purposes*, 6, 238–253.
- Petrić, B., & Harwood, N. (2013). Task requirements, task representation, and self-reported citation functions : An exploratory study of a successful L2 student's writing. *Journal of English for Academic Purposes*, 12, 110–124.
- Polio, Ch. & Shi, L. (2012). Perceptions and beliefs about textual appropriation and source use in second language writing. *Editorial/Journal of Second Language Writing*, 21, 95-101.
- Prior, P. A. (1998). *Writing/Disciplinary: A sociolinguistic account of literate activity in the academy*. Mahwah, NJ: Lawrence Erlbaum.
- Pudin, C. S. J., Storey, J. M., Len, L. Y., Swanto, S., & Din, W. A. (2015). Exploring L1 interference in the writings of Kadazandusun ESL students. *Indonesian Journal of Applied Linguistics*, 5(1), 54-62.
- Qian, J., & Krugly-Smolka, E. (2008). Chinese graduate students' experiences with writing a literature review. *TESL Canada Journal*, 26(1), 68-86.
- Rababah, G. (2001). *An Investigation into the Strategic Competence of Arab Learners of English at Jordanian Universities*. PhD Dissertation, University of Newcastle Upon Tyne/U.K.
- Rababah, G. (2005). Communication problems facing Arab learners of English. *Journal of Language and Learning*, 3(1), 180-197.
- Rabab'ah, G., & Al-Marshadi, A. (2013). Integrative vs. non-integrative citations among native and nonnative English Writers. *International Education Studies*, 6(7), 78-87.

- Ramanathan, V. & Atkinson, D. (1999). Individualism, academic writing, and ESL writers. *Journal of Second Language Writing*, 8(1), 45-75.
- Riazi, A. (1997). Acquiring disciplinary literacy: A social-cognitive analysis of text production and learning among Iranian graduate students of education. *Journal of Second Language Writing*, 6(2), 105-137.
- Rowley-Jolivet, E., & Carter-Thomas, S. (2014). Citation practices of expert French writers of English: issues of attribution and stance. In A. Lyda and K. Warchal (Eds.), *Occupying niches: Interculturality, cross-culturality and aculturality in academic research*. (pp.17-34). Springer International Publishing.
- Rudestam, K. E., & Newton, R. R. (2001). *Surviving your dissertation: A comprehensive guide to content and process* (2nd ed.). Sage Publications.
- Samraj, B. (2013). Form and function of citations in discussion sections of master's theses and research articles. *Journal of English for Academic Purposes*, 12, 299-310.
- Sawaki, T. (2016). *Analysing Structure in Academic Writing*. Springer.
- Sawir, E. (2005). Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal*, 6(5), 567-580.
- Schryer, C. F. (1993). Records as genre. *Written Communication*, 10(2), 200-234.
- Shaw, P. (1991). Science research students' composing processes. *English for Specific Purposes*, 10, 189-206.
- Shen, F. (1989). 'The classroom and the wider culture: identity as a key to learning English composition', *College Composition and Communication*, 40(4), 459-466.
- Shi, L. (2012). Rewriting and paraphrasing source texts in second language writing. *Journal of Second Language Writing*, 21, 134-148.
- Shooshtari, Z. G., & Jalilifar, A. (2010). Citation and the construction of subdisciplinary knowledge. *The Journal of Teaching Language Skills (JTLS)*. 2(1), 45-66.
- Swales, J. M. (1990). *Genre analysis*. Cambridge: Cambridge University Press.
- Swales, J. M. (2013). [Review of the book *Disciplinary identities: Individuality and community in academic discourse*, by K. Hyland]. *Journal of Second Language Writing*, 22, 1-3.
- Swales, J. M. (2014). Variation in citational practice in a corpus of student biology papers: From parenthetical plonking to intertextual storytelling. *Written Communication*, 31(1), 118-141.

- Swales, J. M. (1981). *Aspects of Article Introductions*. Language Studies Unit, University of Aston in Birmingham.
- Swales, J. M. (2009). World of genre—Metaphors of genre. In C. Bazerman, A. Bonini, and D. Figueiredo, (Eds.) (2009). *Genre in a changing world*. (pp.3-16). USA: The WAC Clearinghouse and Parlor Press.
- Swales, J. M., & Feak, C. B. (2000). *English in today's research world: A writing guide*. Ann Arbor: University of Michigan Press.
- Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: A course for nonnative speakers of english* (3rd edition). Ann Arbor, MI: University of Michigan Press.
- Tang, R. (Ed.) (2012). *Academic writing in a second or foreign language: Issues and challenges facing ESL/EFL academic writers in higher education Contexts*. London: Continuum.
- Tardy, C. M. (2005). “It's like a story”: Rhetorical knowledge development in advanced academic literacy. *Journal of English for Academic purposes*, 4, 325-338.
- Thomas, S., & Hawes, T. P. (1994). Reporting verbs in medical journal articles. *English for Specific Purposes*, 13(2), 129-148.
- Thompson, G. & Ye, Y. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365–382.
- Thompson, P. (2001). *A pedagogically-motivated corpus-based examination of PhD theses: macrostructure, citation practices and use of modal verbs*. (Unpublished doctoral thesis). The University of Reading, UK.
- Thompson, P. (2002). Manifesting intertextuality in the PhD theses. *Revista Canaria De Estudios Ingleses*, 44, 97-114.
- Thompson, P., & Tribble, C. (2001). Looking at citations: Using corpora in English for Academic Purposes. *Language Learning and Technology*, 5(3), 91-105.
- Thompson-panos, K. A. R. Y. N., & Thomas-ruzic, M. A. R. I. A. (1983). The least you should know about Arabic: Implications for the ESL writing instructor. *Tesol Quarterly*, 17(4), 609-623.
- Viana, V., Zyngier, S., & Barnbrook, G. (Eds.). (2011). *perspectives on corpus linguistics*. Amsterdam, NLD: John Benjamins Publishing Company. Retrieved from <http://www.ebrary.com>
- Wang, T., & Li, L. Y. (2008). Understanding international postgraduate research students' challenges and pedagogical needs in thesis writing. *International Journal of Pedagogies and Learning*, 4(3), 88-96.

- Widdowson, H. (2000). 'The theory and practice of critical discourse analysis'. *Applied Linguistics*, 19, 136-51.
- Woodward-Kron, R. (2004). 'Discourse communities' and 'writing apprenticeship': an investigation of these concepts in undergraduate education students' writing. *Journal of English for Academic Purposes*, 3, 139-161.
- Yang, L. (2013). Evaluative functions of reporting evidentials in English research articles of applied linguistics. *Open Journal of Modern Linguistics*, 3(2), 119–126.
- Yeganeh, M. T., & Boghayeri, M. (2015). The frequency and function of reporting verbs in research articles written by native Persian and English speakers. *Procedia-Social and Behavioral Sciences*, 192, 582-586.
- Young, L., & Harrison, C. (2004). 'Introduction to the collection'. In L. Young and C. Harrison (Sds), *Systemic functional linguistics and critical discourse analysis: Studies in social change* (pp.1-11). UK: Continuum.
- Zeeshan, M., Sabbar, S.D., Bashir, S., and Hussain, R.I. (2013). Foreign students' motivation for studying in Malaysia. *International Journal of Asian Social Science*, 3(3), 833-846.
- Zerubavel, E. (1999). *The clockwork muse: A practical guide to writing theses, dissertations and books*. Cambridge: Harvard University Press.
- Zobl, H. (1980). Developmental and transfer errors: their common bases and (possibly) differential effects on subsequent learning. *Tesol Quarterly*, 469-479.

## APPENDIX A: REQUEST TO USE UMM THESES BY EFL ARAB POSTGRADUATES

9 July 2015

Madam Rahimah Saad  
Director  
Academic Affairs Department  
(Students' Affairs)  
Universiti Utara Malaysia  
06010 UUM Sintok



Dear Madam

**Request for Data on Arab Students who Obtained PhD from 2008 to 2015  
from Universiti Utara Malaysia**

*Handwritten signature: Unniken.*  
*Handwritten date: 27/8/15*  
RAHIMAH SAAD  
Pegarah  
Jabatan Hal Ehwal Akademik  
Universiti Utara Malaysia

I am Nayef Jomaa Jomaa (Matric No: 900097), a PhD candidate of Applied Linguistics at the School of Education and Modern Languages, UUM and my PhD proposal was successfully defended on 28 May 2015. The tentative title of my thesis is 'Citation Practices in the Literature Review of PhD Theses by Arab Students in Malaysia'.

The study will involve analysing citation practices in the literature review of PhD theses by Arab students who already graduated from Universiti Utara Malaysia. The outcomes of the study will be beneficial for pedagogical purposes, where researchers and English teachers specialised in developing academic writing courses can develop materials based on students' writing needs.

This request is being made since I could not obtain a list of the names of Arab students who graduated from UUM with a PhD degree because the student organisations of each country at UUM are voluntarily based. Thus, they do not have enough information about their seniors of the same country.

The data that is required for my PhD research is the list of PhD theses in Information Technology and also in Applied Linguistics by students from four countries – Yemen, Iraq, Jordan and Libya who graduated within the period of 2008 to 2015. Then, the theses will be analysed at the Sultanah Bahiyah Library.


I would be grateful if the requested data would be provided in the following format.

No	Name	Country	PhD Programme	Year of Graduation
1.		Iraq		
2.		Jordan		
3.		Libya		
4.		Yemen		

I would really appreciate it if you could assist me in getting access to the above list so that I could start my next step (data collection and data analysis) during these coming days. All the data will be treated confidential and used for research purposes only.

Thank you very much for your help and kind assistance. If you have any enquiries, please email me at [upmupm35@yahoo.com](mailto:upmupm35@yahoo.com) or call me at 0176383304.

Yours sincerely

  
(Nayef Jomaa Jomaa)

Matric No: 900097

Room 203, Block 11S, Maybank College

Universiti Utara Malaysia.

**UUM**  
Universiti Utara Malaysia

PhD Supervisor: Dr. Siti Jamilah Bidin

*supported and highly recommended*

  
**DR. SITI JAMILAH HJ. BIDIN**  
Senior Lecturer  
Department of Language Studies  
School of Education and Modern Languages  
UUM College of Arts and Sciences  
Universiti Utara Malaysia

9/09/2015

## **APPENDIX B: PERMISSION TO USE PHD THESES BY EFL ARAB POSTGRADUATES**


In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Awang Had Salleh Graduate School of Arts and Sciences. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:


Dean of Awang Had Salleh Graduate School of Arts and Sciences  
UUM College of Arts and Sciences  
Universiti Utara Malaysia  
06010 UUM Sintok



## Appendix C: Approval (No.1) to Use UMM Theses by EFL Arab Postgraduates



**AWANG HAD SALLEH**  
**GRADUATE SCHOOL OF ARTS AND SCIENCES**  
UUM College of Arts and Sciences  
Universiti Utara Malaysia  
06010 UUM SINTOK  
KEDAH DARUL AMAN  
MALAYSIA



Tel: 604-928 5299/5266/5251  
Faks (Fax): 604-928 5297  
Laman Web (Web): <http://ahsgs.uum.edu.my>

---

**KEDAH AMAN MAKMUR • BERSAMA MEMACU TRANSFORMASI**

UUM/CAS/AHSGS/P-30  
December 10, 2015

To whom it may concern

Dear Sir/Madam,

**APPROVAL FOR THE USE OF THESES FOR ACADEMIC PURPOSES**

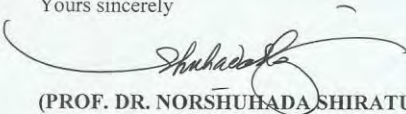
The above matter is referred.

As the Dean of Awang Had Salleh Graduate School of Arts and Science, it is my pleasure to allow this Doctorate (Applied Linguistic) Degree student, Nayef Jomaa Jomaa (90097), to use the following theses as references for academic purposes only. However, the said student must abide by the rules and regulations pertaining to the use of thesis, as have been set by the university.

Thank you.







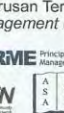





**“ILMU BUDI BAKTI”**

Yours sincerely



**(PROF. DR. NORSHUHADA SHIRATUDDIN)**  
Dean  
Awang Had Salleh Graduate School of Arts and Sciences  
UUM College of Arts and Sciences  
Tel: 04-9285001 / Fax: 04-9285297

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Universiti Pengurusan Terkemuka  
The Eminent Management University

## APPENDIX D: APPROVAL (NO. 2) TO USE UUM THESES BY EFL ARAB POSTGRADUATES



AWANG HAD SALLEH  
GRADUATE SCHOOL OF ARTS AND SCIENCES  
UUM College of Arts and Sciences  
Universiti Utara Malaysia  
06010 UUM SINTOK  
KEDAH DARULAMAN  
MALAYSIA



Tel.: 604-928 5299/5266/5251  
Faks (Fax): 604-928 5297  
Laman Web (Web): <http://ahsgs.uum.edu.my>

KEDAH AMAN MAKMUR • BERSAMA MEMACU TRANSFORMASI

UUM/CAS/AHSGS/P-30  
June 11, 2016

To whom it may concern

Dear Sir/Madam,

### APPROVAL FOR THE USE OF THESES FOR ACADEMIC PURPOSES

The above matter is referred.

As the Dean of Awang Had Salleh Graduate School of Arts and Science, it is my pleasure to allow this Doctorate (Applied Linguistic) Degree student, Nayef Jomaa Jomaa (90097), to use the following theses as references for academic purposes only. However, the said student must abide by the rules and regulations pertaining to the use of thesis, as have been set by the university.

Thank you.

“ILMU BUDI BAKTI”

Yours sincerely

(PROF. DR. NORSHUHADA SHIRATUDDIN)

Dean

Awang Had Salleh Graduate School of Arts and Sciences

UUM College of Arts and Sciences

Tel: 04-9285001 / Fax: 04-9285297

Universiti Pengurusan Terkemuka  
The Eminent Management University



## APPENDIX E: LITERATURE REVIEW SAMPLING (P.4/AL/YE)

“positive politeness” (Brown & Levinson, 1987). For instance, women generally use the hedge *sort of* to fulfill emotional functions and to soften statements in a way that shows concern for others' feelings (Holmes, 1988). Similarly, they tend to use the hedge *you know* as a facilitative device, a mechanism for drawing others into a conversation (Holmes, 1986). Men's use of *sort of* and *you know*, on the other hand, generally serves goals of an epistemic nature; that is, men hedge in order to register degrees of verbal hesitancy and uncertainty.

### 2.5.2 Gender Differences in Written Discourse

Studies that examined the effect of gender on EFL writing was reported to be little (Morris, 1998; Sunderland, 2000; Barron, 2003, 2004; Waskita, 2008; Holmes, 2009). The following studies review some of the main gender related differences in relation to the use of hedges and boosters in the written discourse.

Robson, Francis, and Read (2002) analyzed 87 essays written by history undergraduate students. Robson et al. observed that gender differences among history undergraduate writers were limited although men were slightly more likely to use bold constructions than women. This may be because paralinguistic features such as stress and intonation were not present and because higher levels of conventionalization might have overridden deferential behavior elicited by face-to-face contact.

Mulac and Lundell (1994) studied impromptu essays in which college students were asked to describe landscape scenes that were projected onto a large screen. Drawing upon earlier work in the language and gender literature, researchers coded the essays

with respect to 17 linguistic features, including “male language variables” (e.g., references to quantity, judgmental adjectives, elliptical sentences, locatives, and sentence-initial conjunctions or filler words) and “female language variables” (e.g., intensive adverbs, references to emotion, dependent clauses, sentence-initial adverbials, uncertainty verbs, hedges, and long mean-length sentences). Mulac and Lundell note that the analysis of the essays with respect to gender-coded language variables correctly identified the essay-writer’s gender 72.5% of the time.

In a related study conducted by Argamon, Koppel, Fine and Shimoni (2005), gender differences were examined in a large corpus of fiction writing from British National Corpus. They examined gender differences in the occurrence of certain keywords such as personal pronouns, deictics and prepositions. Argamon et al. (2005) analyzed the texts of the applied science, arts, commerce, and leisure. The findings suggest generally very modest but statistically significant differences between men and women. Such differences, as the writers suggest, result from a female concern with relationships and a male concern with systems and analysis.

In another related study, Palander-Collin (1999) examined personal letters written by men and women in the 17th century. Focusing on the phrase *I think* which combines the first person pronoun *I* and the cognitive verb *think*, Palander-Collin’s result is supported by Biber and Reppen (1998) that personal letters written by women show higher levels of interpersonal involvement than do letters written by men.

## **Appendix F: Literature Review Sampling (P.8/IT/IR)**

Zhang and Jiao (2005) propose utilizing a hybrid system based on Immune Clonal Algorithm (ICA) and SVM. They utilize ICA to simultaneously choose feature subset and SVM parameters which are represented in the encoded antibody population. Huang and Wang (2006) and Zhao et al., (2011) propose the use of a hybrid system which is based on GA and SVM. They would use GA to select suitable features simultaneously with optimized SVM parameters which are represented in the encoded chromosomes. Huang and Dun (2008), Lin et al., (2008) and Vieira et al. (2013), on the other hand, choose to use a hybrid system which is based on PSO and SVM. In Huang and Dun (2008), they mix discrete PSO with continuous valued PSO to simultaneously select suitable features and optimize SVM parameters, Lin et al., (2008) use only the discrete version of PSO to optimize feature subset selection and SVM parameters, while Vieira et al. (2013) use Modified Binary Particle Swarm Optimization (MBPSO) to simultaneously select suitable features and optimize SVM parameters. Conversely, Lin et al., (2008) use SA to simultaneously optimize model selection and feature subset selection. They use a continuous Hide-and-Seek SA to optimize the continuous values of SVM parameters and they represent the features as discrete values. The authors, for this paper, not explain how they can handle the discrete values for features while they use the continuous version of SA to optimize SVM parameters.

Also, Pham et al., (2007) propose utilizing a Bees algorithm to simultaneously choose the best combination of feature subset and SVM parameters values for the process of classifying faults in wood layer pieces. Huang (2009) decides to use a

hybrid system which is based on ACO and SVM. He uses classical ACO to simultaneously select suitable features and optimize SVM parameters. Ding and Li (2009) propose using a hybrid system which is based on a Clonal Selection Algorithm (CSA) and SVM. They would then use CSA to select suitable features simultaneously and optimize SVM parameters, while Lin and Chien (2009) propose the use of a hybrid system which is based on Cat Swarm Optimization (CSO) and SVM. They would then use CSO to select suitable features simultaneously with optimized SVM parameters. Finally, Sarafrazi and Pour (2013) utilize two versions of Gravitational Search Algorithm (GSA) which are Real value GSA (RGSA) to optimize the real value of SVM parameters and Binary (discrete) value GSA (BGSA) to select feature subset. GSA is considered as a swarm based metaheuristic seek approach built on the law of gravity and motion and it is derived from the Newtonian law of universal gravitation. Sarafrazi and Pour (2013) apply their approach only on a binary class classification problem; they did not test multi class classification problems.

All the above works - except Huang and Dun (2008) who apply their work on distributed parallel architecture - examine their approaches on different UCI datasets. From the view point of Huang and Wang (2006), Huang and Dun (2008), and Huang (2009), they consider their works to be a novel and first studies that combine GA, PSO, and ACO with SVM to simultaneously optimize both feature subset selection and model selection.

## Appendix G: Literature Review Sampling (P.15/IT/PA)

### 2.4.8 Replica Placement

Replica placement is the process of identifying where to place copies of replicated data files within a data grid system. Transferring a data file from a site to a client consumes an amount of bandwidth. One challenge that is raised from this is to locate candidate sites where the replica could be hosted [25] so as to minimize the amount of bandwidth used.

In [22], Rangthan and Foster introduced six replication strategies. They compared those six strategies by measuring average response time and the total bandwidth consumed for each strategy. The lower the response time and the lower the bandwidth consumption, the better the replication strategy is. However, there is a trade-off between response time and bandwidth consumption. The authors concluded that if users are focused on lower response time, then the Cascading strategy would be the best option. On the other hand, if users prefer the consumption of bandwidth to be the most important issue, then Fast Spread is the better choice of all the six strategies. Nevertheless, these two strategies also do not consider storage cost. If a particular file is no longer popular, it will still be stored by the storage element. That will therefore be a waste of free storage. In the Fast Spread replication strategy, the replica is copied to every node it visits when it is brought backward to the requesting node. In contrast to Fast Spread, Modified Fast Spread (MFS) [121] does not necessarily copy the replica to every node it visits when it is brought backward. It is copied to the visited node in two cases. The first case is if the visited node has sufficient free storage space to store the requested replica. The second case is if the node's free storage space is less than the size of the requested replica, and this

replica was found more important than a group of existing replicas that their sizes are greater than or equal to the size still needed to make the node's storage able to store it.

In a different approach, the authors of [40] proposed a dynamic maintenance strategy called Dynamic Maintenance Service (DMS) to improve the performance of the grid environment. DMS decides where to place the replicas based on two main parameters: request frequency and free storage space. However, the replica deletion mechanism is not considered; rather the system does not locate the replica at a site unless there is enough space even if it brings benefit to system performance.

Meanwhile, [39] proposed a replica placement scheme that tries to overcome the bottleneck caused by increasing the downlinks, which are occurring at the same time. The proposed strategy chooses the best site to host the replica according to the evaluation result based on the number of user request and transmission cost. The purpose of the strategy is to replicate the file to a site that provides minimum average transmission cost. Transmission cost is defined to be inversely proportional to bandwidth, and the site that provides the minimum average transmission cost is selected.

Following the bandwidth aspect, [118] proposed a replication strategy, called Bandwidth Hierarchy based Replication (BHR) to reduce access time by avoiding network congestion. BHR reduces the time taken to access and transfer the file. It

## APPENDIX H: LITERATURE REVIEW SAMPLING (P. 3/AL/JO)

Similarly, Gungle and Taylor (1985) carried out an examination of the writing apprehension in an L2 setting. The researchers used the Daly-Miller Writing Apprehension Test in the pilot study and found a significant negative correlation between ESL writing apprehension and the expressed inclination to enrol in an advanced writing class. This finding was parallel to the findings of Daly and Miller (1975c) and Daly and Shamo (1978). Nevertheless, a significant relationship was neither found between ESL writing apprehension and perceived writing demand in the students' majors, nor between ESL writing apprehension and concern of the writing technique as opposed to the content.

### 2.7 Strategies to Reduce Writing Apprehension

There are innumerable ways in which writing apprehension can be reduced in students. Stapa (1998) explains why researchers concentrate on reducing writing apprehension and mentions four distinct reasons of writing apprehension. First of all, a particular amount of apprehension or anxiety is imperative for writers to succeed in writing. However, some students display a higher than usual level of writing apprehension that may impact their writing in a negative way and display poor writer's performance. Secondly, students display their necessity of developing writing skills for the purpose of garnering positive encouragement to motivate them. Thirdly, students generally feel apprehension in writing when teachers ask them to compose a text. Therefore, teachers notice this apprehension in students and they will modify their teaching instruction to lessen this writing apprehension. The instructors may focus on correcting grammar, punctuation and students. This is especially true with ESL/EFL learners.

The researcher finds through the literature that the lack of specific guidelines for treatment is tied to several theoretical issues within the composition research field. The first issue is an inconsistency with which writing apprehensive behaviors are represented, that is, a lack of systematic definitions, across the studies, necessary to discuss and research writing apprehension. The second issue concerns about the history and status of various psychological and social representations of writers within composition research discussions (Hettich, 1994).

According to Al-Ahmad (2003), researchers and teachers have made a number of attempts to decrease native learners' levels of writing apprehension. Researchers have also often listed the characteristics of students with writing apprehension including the avoidance of writing tasks, frustration feelings, and poor performance (Daly, 1977; Daly and Miller, 1975; Mabrito 1991; Scott & Timmerman, 2005). More of the treatment from teachers is discussed by Smith (1984) who asserts that the treatment of writing apprehension in a single discrete unit of instruction or during occasional activities is not effective in reducing high levels of writing apprehension. He suggests that teachers should be more concerned with planning their instructions effectively in order to heighten the students' achievement and lessen their apprehension. This planning is as follows: (1) Teachers should focus more on writing style, especially, word choice and connection, (2) Teachers should create writing through a fable, (3) Teachers should focus on argument, and should introduce expository writing.

## APPENDIX I: STUDENT PARTICIPANTS' CONSENT FORM

The purpose of this research is to shed more light on citation practices in the literature review chapter of PhD theses through the experience of postgraduate Arab students studying Applied Linguistics/Information Technology at Universiti Utara Malaysia.

- I have been given and have understood an explanation of this research.
- I have had an opportunity to ask questions and have them answered to my satisfaction.
- I agree to be taped for the interview.
- I understand that the data I provide will not be used for any other purposes except perhaps forming the basis of papers written for conferences or journals.
- This consent is for no other purposes, and the personal information will not be released to others without my written consent.
- I would like to receive a summary of the conclusions of this study when it is completed.
- I agree to take part in this study.
- I agree to submit the researcher 5 pages of the literature review chapter of my PhD proposal to answer questions related to my linguistic performance.

Name:.....

Signature:.....

Address:.....

Handphone:.....

Email:.....

Date of the interview:.....

Time of the interview:.....

Place of the interview:.....

## APPENDIX J: INTERVIEW QUESTIONS (STUDENT PARTICIPANTS)

### Section A

1-Which types of sources do you read to write your PhD proposal?

Published Articles		
Master Dissertations		
PhD theses		
Books		
Others		

2-Which section of the original sources do you read?

Abstract		
Literature review		
Methodology		
Findings		
Conclusion		

3- Which part of the source do you depend on to take/cite information from? Please, rank them based on their priority of importance:

	Abstract		
	Introduction		
	Literature review		
	Methodology		
	findings		
	Conclusion		
	Others		

4-Can you tell me whether the literature review is important or not?

5-Can you tell me about your experience in writing the literature review?

### Section B

6-Do you find any challenges or difficulties in citing information?

7-Which type of citations do you prefer?

e.g. Citation types are divided into integral and non-integral citation (**Swales, 1990**)

e.g. **Swales (1990) divided** citation into two types: integral citation and non-integral one.

e.g. Citation types are divided into integral and non-integral citation [**1**]

e.g. **Swales [2] divided** citation into two types: integral citation and non-integral one.

8- Can you tell me whether using any of these types of citations has an effect on you writing style?

9-Can you tell me about any differences in using these citations when you use them?

10-How can you combine information when mixing multiple pieces of information in one citation?

		<b>Purpose of (using/ not using)</b>
Comma (,)		
Semi-colon (;)		
and, but, also, however,...		
That, which,		
Others		

11-Can you tell me about the processes (verbs) used in citations?

state, believe	
notice, suggest	
think, examine,	

12- When you cite information from other sources, do you try to show your attitude towards the reported information?

13-How can you tell the reader about the importance, weakness, strength of the reported statement?

14- Can you tell me if you adopt an attitude towards the cited information, how can you do this?

15-Have you ever been taught or have read about citation, processes (verbs), tense, evaluation (adopting an attitude towards the cited information)?

16- Do you think that your level of knowledge in your study affects the way you cite?

17-Do you think that your mother tongue affects your way of citing and writing?

18- Would you suggest any other questions to ask other participants?

### **Section C**

- ✓ Thank you so much for your participation in this study. I would really appreciate your participation and your valuable time.
- ✓ The information you provided will be kept confidential and used for academic purposes only.
- ✓ There is a possibility for future interviews.

## APPENDIX K: INTERVIEW TRANSCRIPTION (P.1/IT/YE/M)

R) At the beginning, I would like to welcome brother (...) from UUM, IT department. I would like to thank you for participating in this study and I appreciate your participation and valuable time. Let us start with the questions, Section A, Question One, of course you can speak in Arabic.

### Section A

1-Which types of sources do you read to write your PhD proposal?

Published Articles		
Master Dissertations		
PhD theses		
Books		
Others		

P1) In the name of Allah, the Most Gracious, the Most Merciful, Thank you and we would like to get feedback after the interview [R\_In Sha‘Allah‘.] Of course, for the first question, I usually prefer published articles specifically, ISI impact Factor, also reputable journals with a good reputation that give you more **validity and credibility**. Then, I prefer books, then PhD theses, but for master dissertations, I never prefer them. First, published Articles, there are others [R)What is the reason for choosing articles first to be read, why donot you read books?)] Ok. Regarding articles, as I mentioned earlier, they are usually with more details when in high impact factor, also the **credibility** of the research itself. When they were published, they passed through several procedures before publishing including supervision, editing, and many other things were carried out that **give you specific type of credibility**, there is no manipulation, **there is no manipulation** and you take the **information as true 100%**. This is the reason for choosing articles first. [R) Regarding books?)] As for books also by those who have much experience in researching and are expert writers, they have books we get benefit from details from books not found in articles. We found them in the books. Compiling a book is different from writing a research article. The article is limited to a certain point; it does not give further details. As for PhD theses, the reason for reading them is you are not the only researcher that passed through this experience, reading them gives you support as people follow and search in this area who are interested in this topic. But for master dissertation, no no, personally I never use them to be cited in my proposal, and I do not have any master dissertation to depend on in my research.

R) 2-Which section of the original sources do you read?

Abstract		
Introduction		
Literature review		
Methodology		
Findings		
Conclusion		

You said in your reply to the first question that you read article most, which section do you prefer to read most in these articles?

P 1) Usually This depends on what I am looking for at the very beginning. If I am looking for a certain topic for example, if I have an article, I must determine if this article is within the domain of my topic or not. I never bother myself in reading from the very beginning till the end, I read the abstract and the conclusion, these are the two keys for any article in reading, this is my strategy in reading, the abstract and the conclusion. If I noticed that the abstract and the conclusion discuss the topic I am looking for, I read then the introduction, the methodology, then the findings. I read each part of the article. Usually, the abstract and the conclusion are the most important points. [R)What about the reset, the literature review?]. Ok, look, by order, the introduction and the literature review in the introduction, also the methodology, the procedure, the manner of conducting the research, the manner of achieving the objectives, and the findings, after making sure through the abstract and the conclusion that the article discusses the topic that I am looking for.

R) 3- Which part of the source do you depend on to take/cite information from?

Abstract		
Literature review		
Methodology		
findings		
Conclusion		
Others		

These same sections mentioned in the second question, you found that the article is useful for your topic, which section do you cite information from to be used in your literature review?

P 1) I always use the literature review, the methodology, and the findings, but the abstract and the conclusion are impossible to be cited. I usually cite from the literature review which gives us what has been done and the critical review [R)Do you mean, you use the information of the literature review in the article and use it in your own writing?)] Actually, when he writes the literature review, he uses information from other sources and adds his own critical review, so I can know he tackled the issue and his point of view. If for example, he is talking about distance, then his paper is about distance, so he is looking at the issues through this aspect. So, I know the content of the literature review and on which scope exactly. [R)Do you

mean, this is the article, this is the abstract, and this is the literature review, you have here information in the literature review of the article, do you use this piece of information to be used in your writing of the PhD proposal?] Yes, [R)Ok. How can you make sure that the cited author has evaluated the information or not, and he said that this information is very important, and How can you make sure that this information is true and it is processed twice?] Ok. I go back to his citation, I go back two steps, if he cited from some one for example, I go back, and **this is originally one of the problems that we notice and face, no credibility in citing the information from the original source. I go back to the original source.** If he cited exactly what it is in the original source, I leave the literature review of the article and go back to the main source. But when the cited authors makes addition in the literature review, I will take both the cited author's view and the cited statement in his literature review.

R) 4-Can you tell me whether the literature review is important or not?

You are a student at UUM, you are required to include in your PhD theses several chapters, for example chapter One is the introduction, Chapter Two is the literature review, Chapter three the methodology, Chapter four the findings, up to seven chapters. For example, Chapter four is the findings and forms the core of the study; therefore, it is very important. Regarding the literature review, is it also important or not?

P1) Very very very important and underline it with much focus on it. The reason for its importance is because it positions you in the right way. For example, If you talk about a hot topic, interested people, a country with a plan, a study with implications, practicality, implication, impact, the literature review gives you about number of the authors , where did they arrive, it gives you a chain of events and your position and where is your position and what will be your contribution. A gain, it should be a chain, connected chains, where is your position in this chain and the literature, you may get findings, but at end, the study will be useless. There should be a kind of link, and being from IT, the literature review should be of the latest at least 5 years, if the references are older than 5 years, they are considered outdated.

R) 5-Can you tell me about your experience in writing the literature review of your proposal?

P1) You mean when I wrote the proposal and not now. Frankly, there were many difficulties, **we do not know the ideal way to represent the information. We do not know how to make representation of the cited information.** For example, when we cited statement, then **it is lost because we do not know under which topic to use it** and so on. Now we know, we improved and learned how to use it. Usually, usually, I pass through three or four stages, it depends. In stage one, I made a table and I put the source as it is exactly. I cite the sentence and put it as it is exactly. Ok, this is in the first stage. In stage two I make paraphrasing for it. In stage three, I try to connect it with the sentence preceding it and the sentence following it. Connection that is called 'linking'. Then how these three sentences are paraphrased in a different way and add my own critique. Usually, there are three to four stages. Sometimes, the low level of knowledge could not help me in adding critical addition. It is enough as

I have three paraphrased sentences, **I depend only on reporting you cannot criticize, especially in proposal because there are no findings to support**, [R) Ok, you mean after you make an advance in your study, do you make changes in the sentences?]]. This is normal. Everything should be modified; the reporting verbs for example will be modified for example, instead of using expect, you use **'reported'** for example or established. Definitely, not only this, but also I try to write it in a better way after getting more comprehension, I have more understanding, rewrite in a better way in a concise academic language.

## **SECTION B**

R) 6-Can you tell me how do you cite information from these sources (published articles, theses, books) to write it in your literature review? What techniques, ways, and strategies do you follow?

P1) I feel I have already answered it. Frankly, there is no addition. If I add, in my present position after the proposal, and what has happened. But for the period before the proposal defense, I mentioned the way of citing the information. After the proposal defense, things become easier, at the beginning which topic I am going to discuss. When I decide the topic, the topic in details, the process is easier and faster.

R) 7-Do you find any challenges or difficulties in citing information?

P 1) **As was mentioned previously, among the problem was in not citing the information exactly on the part of the writer. When you cite from a certain article, you do not really know if the writer is really citing exactly or not, and this was one of the challenges, where we are forced to go back two times and three times to the original source in order to make sure of the credibility of the cited information, you have to appreciate the owner of the information. This was one of the problems, the difficulties that exist. The second point is one of the strange things. Some people, when he tries to criticize, he changes the whole sentence, he uses strange words in order to avoid plagiarism for example. Thus, he changes its meaning into another aspect. This is also one of the issues. The difficulty was in how to representation in a new way, in a better way, how to make it appropriate to the context. This involves linguistic issues?** [R (Yes, I mean the linguistic aspect?)). For the linguistic aspect, **the problem is how to rephrase it in a way that differs from the author's way and you add your own personal touch and not to lose the meaning and present it in a new way that reflects your way of writing.**

R) 8-Which type of citations do you prefer?

P1) Frankly, I do not prefer any, but it depends what I want in this place, how to highlight, usually, overall in my thesis as a whole, I use the non-integral. **But to highlight, particularly when something is very important, similar to the expression according to, that is used in APA style, in our area we say, in,,,(,.) is used to attract the reader to something that is very important. It emphasizes the information, and attracts the reader to something that is very important, because you mentioned the name of the author, the year, as well as the citation itself, these three things mean give me your attention, and it it differs from the**

non-integral, which only indicates the names of the authors. Even the style of writing in **the integral citation implies to give attention** because there are three things [R] When comparing the integral and the non-integral, you mean there is a difference in meaning?)] All cited statements are important, but **in integral**, it is like to address someone, to call him for an **important thing**. All of them are important, but their representation, it implies, if the reader lost interest, come back again, because **the style of the writing involves the name of the author, the year, as well as the citations, these three things imply to give me your attention**, here there is something that is different, [R]What does number [1] refer to?)] Citation [1] represents the reference as a whole, in which year, in which journal, the page, in which conference, the whole reference, the difference with example 4 is when you mention the name of the author with the year, it is the same.

R) 9- Can you tell me whether using any of these types of citations has an effect on you writing style?

P 1) What do you mean be effect, positive, negative? [R] it is not determined)]. For me, I feel that it **affects positively**, for two reasons, the first reason, you **distance the reader form the routine way**, you talk like addressing someone and particularly when you **attract his interest for a certain information** when you use the integral you attract the reader's attention. It means give me your interest because there is something important here, it makes him feel like in a real experiment. So, they are two reasons: is to **emphasize the information**, and **attract the interest of the reader**. It affects positively. I talked about the theses in general, and my thesis in particular, the majority was used in the non-integral citation which dominated over the integral. Using the integral, if you want me to explain more, we have in Arabic styles, we call them interrogative and affirmative styles. The interrogative styles is when you say How,,, it is like a question, so you **give more interest to it**, but in the affirmative style, you tell him about a normal thing that is known and might be true or wrong. [R(You mean here you are affected by this style? You used the Arabic style?)] No, on the contrary I reflected it on the Arabic language, but it was not derived from the Arabic language, The **Arabic language did not affect**, but I tried to make the meanings clearer. [R] Can you tell me about any differences in using these citations when you use them?]. They are similar to a great extent in order to be also different. They are similar, whether the citation is at the beginning or at the end, the way of writing them is similar, there is no difference, but the difference lies in confirm a thing, and attracting the attention of the reader only, but regarding writing, **the style of writing as references**, they are the exactly the same, there is no difference.

R) 10-How can you combine information when mixing multiple pieces of information in one citation?

,		
;		
and, but, also, however,...		
That, which		
others		

I usually, always use comma, particularly when it comes with relative pronouns, usually, when you say whereby‘, thereby‘, which‘, therefore, we should put a comma after these in order to connect two sentences or two information together, [R) Before or after?). Before them, before which‘. Usually using which goes back to the nearest, there is no need, but when you say which will, that is another sentence of another result, it is different, it is different depending on what you mean exactly. It means whom you describe exactly, yes, exactly, you are connecting what with what. [R) What about using the semi-colon [;]?). Frankly, the semi-colon **I never use it absolutely**, [R) Why, what is the reason?)] **We have not learned such issues, our learning was based on following others, I could find other researchers who used it in order to use it.** I like to learn how to use it and when to use it. **The reason is I do not know how to use it and could not find any other researcher who used it. I represent others in their way of writing.** [R) What about using conjunctions, however, but,..?) I do not use but, I always use however‘, [R) What is wrong with but?). To the best of my knowledge, to a certain extent, but‘ is non-academic. But, however‘, is used to criticize. Even for so‘, we usually use Therefore‘, To my knowledge, some words are more suitable, I use though, whereas, while, whereby, thereby, thus.

[R) Do you have a prepare list of these usages when you start writing?)] No, there words come spontaneously according to the context where to use it exactly, this is my way of writing,

R) 11-Can you tell me about the processes (verbs) used in citations? Can you tell me about any differences or similarities in using these processes?

state, believe	
notice, suggest	
think, examine,	

Here we usually **do not use believe** because we are in a Science field, verbs like **believe** and, **think** are not used, on the contrary they give bad impression, even for the examiner. I think, we cannot think, **it is hard to use**, suggest? No, we **do not use these**, suggest, the question is **who are you to suggest**, but we have the verb state, notice, observed, examine, established, investigate. Yes, they are different. The verb noticed is used when you describe a certain figure, you say as noticed in figure so, or as seen, by these you are **stating facts** also, you refer to things, but the verb believe, you are talking about emotion, about a thing belongs to you alone, it is not necessary

that others believe as you believe. Each verb has its own usage. We use the verb examine when there is something that is doubtful, questionable, or a thing that you want to prove, for example, we have in technology, when you transfer something from one domain to another domain, for example, you use a thing used in wireless, and the wireless is waves, to be used in light. So you want to examine this thing, if it is applied in the other domain, does it really work or not. So the use of examine, is not necessary to doubt something, but a thing you transferred from one place to another, you want to make an investigation or analysis. For example, so to examine, to prove that it also works here [R] the verb examine, does it have positive implication, negative implication?)] No, this depends on the findings, you are explaining a case, a something, but is it necessary to have negative or positive results. This is proved later, a thing that is determined by the investigation and the findings,

R) 12- When you cite information from other sources, do you try to show your attitude towards the reported information?

P1) **It depends. Of course, if it is a fact, it is difficult; it is a fact, something that is agreed on. Additionally, it depends, do you have knowledge to add or not, you only paraphrase it, but it is the same content, you did not change anything, but after getting findings and your study is focusing on such a thing, of course, you feel that you can contrast such issues as a whole. It depends on where is your position.**

R) 13-How can you tell the reader about the importance, weakness, strength of the reported statement?

P1) Of course, I do not know what do you call them linguistically, but I will give you an example, and you name it, for example, some sentences as if they are warning the reader, additionally, they give more confirmation and more importance, [R]Like what?). For example, you say this significantly..., this has remarkable attention, this technology regarded as.... This technology proves its superiority, or it is superior than, we use words to indicate importance, here there is to attract the attention. [R] Do you have certain techniques you use to evaluate the information?). **Criteria for evaluation** are two things, this goes back to the first question, that is : 1- **reputable articles**, things are 100% **valid and trusted**, and when you make citations from such articles, this means it is OK, and in ISI, there is sometimes real experiment, not only a way of simulation, and is not subjected to manipulation. [R] Do you mean that type of the source determine the strength of the information). Yes, **the quality of the source determines the strength of the information**. First, the quality of the source, another thing is [R] Do you cite information from conferences?). There are some conferences are at the same level of the journal in its strength. If we talk about weak conference, it is impossible to include the weak conference in the problem statement as citations, but as a literature review, you can include two to three if you like to add the number of the citations. [R] This information you take it from a reputable journal and you said that the information is valid 100 %, what types of words for evaluation?)] There are **words in Technology**, for example, we say practically implemented, deployed, something convinces the reader that this thing was tested,

was used, and succeeded. This gives a sort of satisfaction, **validity and reality, and trust towards the sentence**. There are also several stages, we can say impact, say industry, but it is not practical. Industry is stronger than when you say academic, when you say industrial, at least it is used practically. But academic is a doubtful case. So, you have to add certain words. These have indication in Technology, like deployed, practically implemented, implementation, evaluation. It is already evaluated. This means you can trust it

R) 14- Have you ever been taught or have read about citation, processes (verbs), evaluation?

**Never, it is self-taught. Unfortunately.** Studying citation is very important. No doubt it will add important information. At the end, the reader is not necessary from IT, it can be a manager or others, do not think that each one who reads the thesis must be from IT in order to understand what you are writing. Therefore, citations, verbs, tense, I think is very important and would add excellent effect, **I would like to have a course if there is a course I will join it directly and blindly because it is an important issue. I repeat again, unfortunately, we did study such issues at all. Even in academic writing, we learned how to write an essay. For example, citations, how to criticize, how to report, to be critique, verbs should be used, how to use it, favoring verbs, over verbs, all these we have not learned.** It is self-taught. I use the internet more than reading books. I use the internet, I watch videos, for example, how to write, and additionally from my discussion with linguistics students and you are one of them, especially reporting verbs which are very important.

R) 15- Do you think that your level of knowledge in your study affects the way you cite? How?

P1) Yes, there is no doubt of it, **it has become more appropriate in using the citations, where to use it exactly**, where I have to use citations. There are places which must include citations. **At the beginning, there was only one statement with one citations and that is all**, but now more than two or three citations are used in one sentence. It became more detailed and more accurate, with many citations.

R) 16- Do you think that your mother tongue affects your way of citing and writing?  
I teach Arabic, but because my bachelor was in English, Master was in English and PhD was also in English. **Arabic did not affect my English writing.** On the contrary, I use English to apply it on Arabic. I have been in Malaysia for 10 years. **Malay language has some effect on writing, to some extent.** Yes it has some effect on writing in some words, for example, performance evaluation, it is converted wrongly. It **has effect** because it is **easier than English**, so its effect dominates.

R) 17- Would you suggest any other questions to ask other participants?

P1) How do they know the strong and weak points in his thesis. How to be modest, humble, when something new, how to strengthen?

## APPENDIX L: INTERVIEW TRANSCRIPTION (P.7/AL/IR/F)

### SECTION A

1-Which types of sources do you **READ** to write your PhD proposal? why? For example: why do you read published articles? Why do you read books?

Published Articles	✓	
Master Dissertations		
PhD theses	✓	
Survey papers		
Books	✓	
Others	✓	

#### Answer:

Reading is the basic and first step in writing a PhD proposal. In fact, I have relied on various sources to read about my proposed topic including published articles, PhD theses, books, as well as browsing related web sites. I have got benefit from reading these sources. Through reading such types of sources, I understood how to organize my study and how to write academic paper. For example, reading published articles kept me in line with the latest literature in relation to my field of study. In addition to published articles, books are of a considerable importance in explaining the fundamental definitions, concepts, theories... etc. What has helped me a lot in writing my PhD proposal is reading PhD theses. Before reading any PhD thesis, I did not know how to write the background of the study, the problem statement, literature review, methodology of the study ... etc. However, I got rid of this problem when I began reading PhD theses. Concerning scientific web sites, I browse them when finding a problem in understanding a certain concept or theory.

2- Which criteria do you follow to trust the information in these sources? How do you know that the information in these sources is correct?

#### Answer:

**In fact, it is very difficult to judge the truthfulness of information published in the sources that I have read.** But, in my opinion, there are certain criteria to be followed in order to know whether the information is correct. Firstly, the authenticity and reputation of journal or book in which the related information is published. Secondly, the information is based on definite theoretical and conceptual frameworks related to well-known authors in the field.

3-When you read a thesis or an article, which **SECTION** of the these sources do you **READ**? Why? For example, if you read the abstract, why do you read it?

Abstract	✓	
Introduction		
Literature review		
Methodology	✓	
Findings	✓	
Discussion		
Conclusion		

**Answer:**

When reading a thesis or article, I focus on its abstract for highlighting the main aspects of the study (i.e. it contains the problem statement, objectives, methods, and findings), methodology for illustrating the design of the study (i.e. its methods, sample of data, and data analysis), and findings for revealing the main contribution of the study (i.e. finding new information to the field or supporting the existent literature about the field of the study).

4- Which **SECTION** of the source do you depend on to **CITE INFORMATION** from and put it in your literature review? Please, rank them based on their priority of importance:

**Answer:**

Rank	Section	
3	Abstract	
5	Introduction	
6	Literature review	
4	Methodology	
1	findings	
7	Discussion	
2	Conclusion	
	Others	

5-Can you tell me whether the literature review is important or not? Why it is important/not important?

**Answer:**

Yes, it is important. Its importance lies in showing the related literature as well as revealing the gap of the study, illustrating the appropriate methodology for the study, highlighting the main findings in relation to the specified study, and paving the way for future authors in the field.

6- In **writing your literature review of your PhD proposal**, can you tell me about your **experience**?

**Answer:**

I think literature review chapter is the basis on which other chapters depend for the reasons mentioned in the previous answer of Q 5. Accordingly, as I think, writing a literature review about the study is difficult. **My experience in writing literature review was challenging in certain aspects. For example, reading more sources about my study, especially the current ones, was difficult for lacking enough current sources to enhance the gap of my study. Moreover, citation of information forms another difficulty since I have to paraphrase and synthesize it with information from other sources (depending on its similarity or difference in the available sources).**

7- What **POSSIBLE OBSTACLES/DIFFICULTIES** faced you in **WRITING THE LITERATURE REVIEW**?

**Answer:**

1. Collecting and reading current and reliable sources related to the study.
2. The relevance of the information to be cited.
3. Paraphrasing and synthesizing the collected information from sources to be incorporated in the literature review chapter.

## SECTION B

8-Do you find any **challenges or difficulties** in **citing information**? What are these difficulties?

**Answer:**

Yes, I do. The following list clarifies them:

1. Its reliability.
2. Its contribution to enhance my study.
3. Its scientific value.
4. Its novelty.

9-Which type of citations do you prefer of the following examples ? Why do you prefer example (A) or (B)?

Example (A) Citation types are divided into integral and non-integral citation (Swales, 1990)

Example (B) Swales (1990) divided citation into two types: integral citation and non-integral one.

**Answer:**

As for me, I have employed both types of citation. I think each type has its characteristics that make it preferable than other types. For example, citation type in **example (A) is the simplest one**, whereas **(B) involves the author to use a suitable verb for the information to be cited, especially in relation to the controversial information. Hence, authors must know how to use evaluative, argumentative, supportive, or any other forms of verbs when citing information in their study.**

10- Can you tell me whether using any of these types of citations (Example (A) and (B) has an **effect** (positively or negatively) on you **writing style**? How does it affect?

**Answer:**

I do not have much to be said in relation to this question, but, I think, it may have a positive effect in using a varied style in writing the information and showing author's ability in using consistent and clear writing style.

These examples (A) and (B) represent different types of citation and each type have its own characteristics. They are used to change the writing style and enhance author's ability in dealing with others' information, opinions, or thoughts.

11-How can you **combine information** when mixing multiple pieces of information in one citation?

		Purpose of (using/ not using)
Comma (,)		Used to join clauses as well as in the case of enumeration inside the paragraph
Semi-colon (;)		Used to join subordinate clauses
and, but, also, however,...		Used to add, negate, or show difference
That, which, others		Used to clarify what precedes it

12-Can you tell me about the **verbs** used in your citations? Can you tell me about any differences or similarities in using these processes?

state, believe, notice, suggest, think, examine, report, show

**Answer:**

In fact, I have used verbs like state, argue, opine, contend, think, show, and believe to cite the information. There are differences in the uses of these verbs. For example, if I want to cite information that reflects **controversial opinions**, I will use the verbs **argue** or **contend**. So, the difference in using one verb process rather than others lies in the type of the information to be cited.

13- When you cite information from other sources, do you try to **SHOW YOUR ATTITUDE** towards the reported information? How can we know that you revealed your attitude?

As it is known, the **researcher has to be objective** when citing others' information, but **s/he has to show themselves in what they cite**. This can be achieved through the **use of verb process** since there are some verbs used to **reveal researcher's attitude**; for example, the **verb (claim)** is used to show that the researcher **does not agree totally** with the author's opinion. In addition, the verb (**agree**) is used to show the researcher's **agreement** with the author's opinion.

14-How can you **tell the reader** about the importance, weakness, strength of the reported statement? If there is important statement in your literature review, how can you tell the reader that this piece of information is important?

**Answer:**

The researcher can denote the importance, weakness, strength of certain information through the use of certain phrases or clauses. In my study, if there is an important statement, I refer to it using (of **importance** is ..., it is **noteworthy** that..., **notably**,... etc.)

15- Do think that your level of knowledge affects the way you cite, the way you write, and your attitude towards the cited information in your literature review?

**Answer:**

**Yes, of course** the level of knowledge affected the way of information citation, writing, and the attitude towards that information. The knowledge paves the way for the researcher to improve the mechanism of writing and information citation, as well as ways of thinking on certain topic.

16-Do you think that your mother tongue (Arabic) **affects** your way of citing and writing? How?

**Answer:**

**Yes, sometimes. When I read about certain information and do not understand it, I translate it into Arabic for clarification. When I understand it, I can paraphrase it and restate it using my own expression. But, sometimes, I face a problem in paraphrasing that quoted information due to misinterpretation which resulted from using Arabic language. So, it can be said that the researcher's native language may affect positively or negatively on the way of citing or writing.**

17-Have you ever been taught or have read about citation, verbs, tense, evaluation? How did you learn about using these points?

**Answer:**

Besides attending academic courses, I have read many books and journal articles concerning mechanisms of academic writing in different fields of knowledge to learn how authors deal with the information when citing it. I have got benefit from both

academic courses and reading various sources to learn more about mechanisms of academic writing.

18- Would you suggest any other questions to ask other participants in the following interviews?

No, I do not have suggestions as I think that in general your questions cover the purpose of your interview.

### **SECTION C**

- ✓ Thank you so much for your participation in this study. I would really appreciate your participation and your valuable time.
- ✓ The information you provided will be kept confidential and used for academic purposes only.
- ✓ There is a possibility for future interviews.



## APPENDIX M: SUPERVISOR PARTICIPANTS' CONSENT FORM

The purpose of this research is to shed more light on citation practices in the literature review chapter of PhD proposals through the perspectives of EFL Arab postgraduates' supervisors at Universiti Utara Malaysia.

- I have been given and have understood an explanation of this research.
- I have had an opportunity to ask questions and have them answered to my satisfaction.
- I agree to be taped for the interview.
- I understand that the data I provide will not be used for any other purposes except perhaps forming the basis of papers written for conferences or journals.
- This consent is for no other purposes, and the personal information will not be released to others without my written consent.
- I would like to receive a summary of the conclusions of this study when it is completed.
- I agree to take part in this study.

Name:.....

Signature:.....

Address:.....

Handphone:.....

Email:.....



## **APPENDIX N: INTERVIEW QUESTIONS (PHD SUPERVISOR PARTICIPANTS)**

- 1- What are the supervisors' perceptions of the importance of the Literature Review in relation to other sections of the thesis?
- 2- What are the characteristics of a good literature review?
- 3- What are the supervisors' perceptions of EFL Arab postgraduates' problems with writing the Literature Review of their PhD proposals?
- 4- What are the supervisors' perceptions of EFL Arab postgraduates' problems with the use of the citations in the Literature Review of their PhD proposals?
- 5- Does the supervisor give the students feedback on such issues?
- 6- How can PhD Arab postgraduates overcome such problems?



## APPENDIX O: INTERVIEW TRANSCRIPTION (S 1/AL/M)

**R)** In the name of Allah, the most Gracious, the most Merciful.

I would like to thank Dr. (...) so much for accepting to be interviewed. I hope students in Applied Linguistics and in our school get benefits from the data he will support my study.

**S1)** Alright, thank you very much Nayef for giving me the opportunity to be interviewed, and especially, hopefully, whatever the outcome of this interview will assist you in your research. (R)In sha‘Allah).

**R)** Of course this study talks about students‘ citations, how they cite from other sources and integrate this kind of, the cited statements into their literature review. We have many questions. First:

1- What are, as a supervisor, have many students from different countries and from Arab countries in particular, what are the supervisor’s perception of the importance of the literature review in relation to other sections of the thesis?

**S1)** Alright, when we talk about the literature review, this actually reflects about the students‘ **depth of reading**, that is of **understanding of the topic** and usually when we talk about the **depth of reading**, we assume that the students who plan to do the PhD will try to read as much as possible. He tries to read not only books, but also articles from journals, because the requirements of the student to at least read the reason publication because we do not want students to do research which people have already done. So by doing, reading, they will not, they will try to avoid what we call reinventing the wheel. They will not do what people have already done. So normally, as a supervisor, I expect students to read and give me feedback and tell me and comment on other people’s work and how their work would be related to what people have done. Of course, we do not expect students to come up with a new thing, but in research we want students to be able to expand the literature, what people have done, he just come and tell us and the reason publication and what people have done and they move forward from there, and as we all know, Literature review normally the beginning of research starts with the reading, and only then we move on to other sections in the thesis. So the first thing I we encourage students to do is to read as much as possible in the area of their research.

**R)** Um, so do you have any certain strategies of reading you recommend students to follow in order to get a lot of information and at the same time save time. You know that many many publications each year and each month so it is hard for students to read all the sources, so do you have any strategies you recommend students to follow in order to save time and at the same time to avoid as you said reinventing the wheel?

**S1)** Right we can keep Nayef. Usually students, there are many types of students, some who **have not done research** before, some who have, I would say, have managed to do some kind of research, have written, published some publications. So there are two types of students: for the first type of students, normally I would ask them to read specific books, specific references. So normally I would lend them my books, especially and I would expect them to read about certain areas of research but particularly, specifically towards their research, the title of the research, and from there on, I would advise them to look at the references at the back to continue go and find new sources related to their study and usually I would also forward them some articles related to their study and hopefully by

giving them references from the books and also articles that would help them to find more articles, in the future,

**R)** For the next question, what are the characteristics of a good literature review?

**S1)** I would say that this is a good, is a very good question, and that is the question that normally students, especially the **new students of PhD** have **problems**, trying to **understand what is the good literature**. I come across one student from Yemen, my former PhD student, always come and tell me, what is the gap, is there any gap for my study. She keeps on repeating the word gap, because she has been listening to lots and lots of talk, speeches given by others, colleges, and they would insist that students in the PhD they must have a gap in their research, that is when they are trying to answer the question, what are the characteristics of a good literature review. Usually we expect students to be able to read, and to summarize, right, and to comment, not only summarize, but able to critique other people's work, and not only just critique, but to give their own personal comment, about what not only other people's work, but also to support with their own comment, the strength, the weaknesses of other people's work, and then, how that particular study could be related to, how it is linked to the student's research. So one of the particular good literature review would be able to comment first on other people's work, and to me number two is to be able to link between other people's work and their own work, right, how it is related, for example, when we talk about the definition of certain words, the definition of vocabulary, in research on vocabulary, there are many definitions. So I would expect them to tell me which definition can be used in his or her own study, and I expect him to give also why he chose this of scholar A and not scholar B, so he is able to differentiate between why, what is the strength and weaknesses of scholar A's definition, and how is it different from scholar B's definition, right, then, how it is linked to their study.

**R)** Um, just to mention, one point, you know, a student at the beginning of his PhD, if for example he started with article No 1, his knowledge in his area and his topic is still low, and if he started summarizing that article, do you think that he will be able to comment on that study? That is the first article, so how can he know that there is a gap, and how will link his study to this topic, this is one of the problems that students in my previous interviews commented one, they said that up til now we do not know, we are just suggesting a proposal in order to solve a problem, so how can we, I, as a student, show my personal, because they said that out attitude is still shaking, not supported by any kind of findings, so what do you suggest for such a problem?

**S1)** For **new PhD students**, right, because, I believe some come **fresh without doing any research** mainly at home, so when they come and their supervisors, want to start their PhD, one I ask them to do some kind of reading, when they come back, usually they give them all kinds of reports, comments, etc, so usually, when I look at their, first impression after looking at their first writing, right, I would know whether is this a novice researcher or is this an established researcher. So, once I know this is a **novice researcher**, which **have not done research before**, so the best thing I would recommend them, right, to do is when they read an article, I ask them to prepare a table, alright, I ask them to prepare a table, sometimes, I give them a table, ask them, Ok, to write the author's name, the year, and then I ask them to write the research question, how many research questions are available in that particular article, and then, I move and ask them to do, look at, how does the scholar of the research or the writer, the kind of the

research method being used to answer the research question, and then I also ask them to write in the table the subjects, how many, what is the sample line, right, the kind of sample, and then I ask them, in the table, to summarize the findings, alright, and then, so I train them to look at all these important things, whenever they read, they would put into a table, so the next time they come across another article, they will also do the same, alright, so as they continue reading, was finished reading many articles, I asked them to compare, so far from that table, what you can see, how many people have used this kind of research method, in trying to answer this type of particular questions, right, so far, looking at the sample, students from which level, tertiary, secondary, or the focus is on the secondary level, right, secondary school students, so nobody has done on tertiary, so I ask to look at all these things, so hopefully by asking them to do all these things, they will train them to look at the strength, and making comparison and contrast, so training them, so because I was talking to one of the students yesterday, so she was saying, the table had helped me a lot I asked them to do in terms of thinking, because she was just read articles without knowing what is it I expect what is actually required from the reader, so when I asked them to write this table, some would begin to see, there is some gap here in terms of the so far, all has been using a questionnaire, no body have used observation, no body have used interviews, no body have used rhetorical introspective protocol, so meaning that by doing this table, usually, right, usually students would be able to see all those gap in their research.

**R)** So, we come now to question three: As a supervisor, what is your perception of EFL Arab postgraduates' problem in writing the literature review, in their PhD proposal, were there any problems, what are these problems?

**S1)** All my PhD students irrespective whether they are Arabs or Non-Arabs, usually they come with **lack of reading**, they are very interested to do a research, but usually they **do not have the depth of the reading**, the **depth of understanding about the area**, so in other word, they **start from Zero** when they first come and meet me, so I have a sort of, I did not expect them to write as good as they are in the final year, the **first year** is usually the **most critical year**, the students have **problems**, trying, **struggling, to write using correct grammar, to write**, they even have **problems** with **punctuation**, right, especially for Arab students, they have **problem with punctuation**, right, they **do not know where to put the stop, the sentences are very long**, and some Arab students also **have problems** in terms of whether, should they, the quotation, right, **borrowing other people's work should also that be cited, so should that be acknowledged, they believe it should not be because they believe that other people's work is like their work too, should be shared by everybody**, so it needs some kind of training, that is why I advise them to go to academic, research methodology course to learn about all these things.

**R)** So, now we come to question four: What are the supervisor's perception of EFL Arab postgraduate's problem with the use of citations when they cite information from articles, from theses, and use these citations in their literature review?

**S1)** Right, so usually, they like to cite, **they like to quote**, right using, I would say, like to take may be certain, **the whole paragraph** and they have **problems in paraphrasing**, sometimes they **quote without citing**, right, when we check through Turnitin, suddenly, we tell them, oh, have you borrowed from other people's work? Yes. How come **you did not cite?** they **did not know how to cite**,

and then, sometimes, of course, they use the **word** like **they** like to use the word which is **not academic** like says, right, they would say, says and they would **repeat some of these reporting verbs, simple reporting verbs** like **shows** right **says**, **said**, and I would **not find a very good reporting verb** like **argued** no, I **could not find that**. **emphasize**, **stress** “ **only very simple kind of citation**.

R) Here we have some points related to citations. For example, the type of the citation (integral, non-integral), so would you like to comment on Arab students' use of this type of citation?

S1) Yes, um, usually they would go for non-integral, right because they have a **problem in paraphrasing**, right, so in other word, they would **just take other people's work and put in a quotation** marks, right and then, in terms of the type of processes, of course the words like **think**, **believe** **say**, **state** these are the **common one**, very **difficult to find other reporting verbs** like **argue** or **agrees** **comments**, right **recommended**, it is **difficult to find other, only very simple kinds of citations and reporting verbs**.

R) The other point within these citations we have what is called **stance** or **attitude** when students cite information from articles, do you expect him to show his, I think you mentioned this point in characteristics of a good literature review, you said a student has to comment, the good literature review should include the students' personal view, so this is called stance or attitude, would you like to comment on this point, as related to citation, or you believe that this should be used not in the citation itself, but in other, at the end of the paragraph, at the beginning, or, if we consider it as a good citation, should it include the stance of the student?

S1) Students make **very strong claims** at many times, **but not cited**, they live to make **claims from their own interpretation**, when i said for example, they make a claim like, remember some of those like, in Jordan, right, many students have **problems with their English**, English is may be not an important language due to the **influence of the Arabic language** for example, so when they make this kind of statement, I said, this is a **very strong claim**, right, so **where is the citation**? Right, and then, when they are doing the analysis, they also make claim, right, like for example interpretation of the finding, and there is also **no hedging**, probably, right, possibly, right, so in the discussion they **have problems in trying to make all these hedging in their writing**, so normally I would tell them that this is only, you **cannot interpret your findings straightaway** without any hedging because hedging, whatever that you interpret can be true or not true, so you **have to use hedging** like possibly, etc,

R) Question Number Five, does the supervisor, you as a supervisor, give your students feedback on such issues, for examples, issues like type of citation, for example, if a student uses integral or non-integral, you recommend him to use the other type or the type of the process, your feedback, does it include this kind of information)

S1) No, usually, I **do not give any feedback on that**, usually I try **not to give the feedback on those reporting verbs**, mainly because I do not want to change their way of thinking, if there are cases where I think they **use very repetitive kinds of reporting verbs** like they always use **stae**, **shows**, **says** then only I would say that you should not use all these reporting verbs because this is **not acceptable**, other reporting verbs which they have used, and I think they are Ok, then, I just would not recommend to change it, **only if they are non-academic**, like **says**, right, so that, I would ask them to change,

**R)** So, the last question, we discussed some problems related to Arab students' use of citation, How can PhD Arab postgraduates overcome such problems, what do you recommend, what are the solutions?

**S1)** Ok, for new PhD students, normally they are required to attend academic writing course, that is the first thing, right, so normally, I would check, because the assumption is in academic course, they would be exposed to all these things, about how to write, because when I was doing my PhD, I was also asked to take academic writing course and I learned a lot, because I ask questions, etc, then from time to time, I would ask them to go and attend short courses offered by postgraduate school, and then, especially, even Dr.(...) also have a record I also collected a post, then normally would encourage them to attend these courses, especially on writing, and finally I would advise them to at least look at other, when they read, other people articles, journals, as well books, hopefully, they will learn indirectly from them, of course, I would guide them from time to time, if there are problems in their writing. That is All.

**R)** Alhamdulillah, Thank you so much Dr (.....).



## APPENDIX P: INTERVIEW TRANSCRIPTION (S 5/IT/M)

**R)** In the name of Allah the most Gracious, the most Merciful,

I would like to thank Prof. (...) so much for giving me this opportunity in order to get valuable data from him concerning the citation practices of students in IT.

We have some interview questions, we have for example, interview question one,

1) The supervisor's perceptions of the importance of the literature review?

I met some students, and they said at the end, the examiner will not read the literature review, they will focus more on chapter one and chapter three, and the literature review is just a kind of filling information,

**S 5)** That is not true, because, for me, I think the literature review is very important, chapter because we want to know one thing is that how the synthesis of the literature, actually can lead to become the basis of the work, of the PhD work. The poor literature review, actually some of my students actually, if they do not write a good literature review, then they need to **re-do the thesis**, because it provides actually one, is the **level of understanding** of the subject, how they put it together, how they can conceptualize the idea of the whole research, you know. Within the framework of the literature review, if they cannot put the literature review in the correct way, then it is not, the thesis is not good, so for me I think they need to come up with a good literature review, very critical literature review because they need to know, they want to contribute something to the knowledge, and they need to evaluate what other people have done related to the field, and the literature review serve that. And they need to provide the claim mostly in chapter one, they need to substantiate the claims and so on by reviewing the literature review, so it is as important as chapter one, I think chapter two is very important.

**R)** Ok, I remember last time when you presented that workshop, and you listed the power of C, when talking about the characteristics of a good literature review, so this is the question two,

Characteristics of a good literature review, for me, I am still a researcher, and sometimes when I get some information when I interviewed the supervisors, I still modifying my literature review based on their comments, would like to give a description of the characteristics of a good literature review.

**S 5)** Well, the most important thing the literature review must be comprehensive, comprehensive means it covers all the aspects of the research and the claim in chapter one, as claimed in chapter one. Conceptually, it must be covered, the whole idea of the work. So, this is one important thing, and when we say comprehensive, it is a challenging thing as well, because you can be comprehensive but putting three volume or four volume of literature this is, so that is the challenging thing, not only comprehensive, the challenge to the students is to make it concise, and the word cushion, not only the literature review is comprehensive but also the literature review must be put within the mount of peace. For me, I think it is about 25% of the thesis, no more than 25% of the thesis, and not only that, it must be correct as well, that is what I call it the power of C, because correctness is very important, [( R you mean correctness in the structure or correctness in the information?)] Well, the literature review is when you say it is critical, yeah, to make it critical, some people just you know what we call it, you know, it is just try to make it together, to make it very critical, but critical in the real sense, critical that is something. I call it need to be correct, not only comprehensive, it is concise, it is cushion, it is correct, and then not only that it is also using what do we call it contemporary especially in the area of IT, in IT

domain, where there are only very few cases where you need to refer to literature for example in the 60<sup>th</sup>, you know. you really need to refer to something which is theoretically important in the 60<sup>th</sup> for example, then it will be Ok. But mostly, it refers to contemporary issues, so the idea of contemporary is very very, I mean the aspect, of contemporary is very very very very important, you know,

R) Because my study is focusing on Arab students, PhD Arab students, so the problems that have in writing the literature review, we are now talking about the beginning of the study till the proposal defense, so writing the literature review during this period, because you know after the proposal defense, it will be different, so now we are just talking about the beginning of the PhD study till the proposal defense, during this period the problems they have in writing the literature review, [(S 5) I do not get what you mean)]. The problems that Arab students have in writing the literature review, when they submit you for example some writing in literature review during the proposal stage, what are the problems they had in writing the literature review, so because you read their writings?

S 5) Alright, normally, during you know when the proposal need to be presented within one year of their study, and **some students do not have a background in research**, so the majority is less, so when the majority is less, they tend to write, they are **reading a less** number of papers, they are reading a less number of the survey types of papers, journals, good journals that actually can provide them with input of how to write critical writing of the literature review. And because of that, I find that many of the **students do not , cannot write it very well, they just paraphrase it**, you know, **instead of that they are really understanding, they have a good understanding of their area**, they just take it, take it, they know that paper that is it important, they take it from here, they take it from here, they take it from here, **without actually you know has the internal grasp of the things**, they do **not internalise the things**, they need to digest the things, **not just you take this part, you paraphrase it, you take this part, you paraphrase it**, and you try to make it critical, that is when I say, I refer to the word correctness just now, you see. Sometimes, **they just pretend to be critical, and they do not internalize it**, because they need really to make their hands dirty of all these things, you know, **not just by reading scanning. Oh, I think this is relevant, copy it, try to paraphrase it, somehow, you know, and at the end, with putting the brackets, with every paragraph, at the end of the paragraph, they put the brackets. If you look into the various previous literature that they do, at the end of the paragraph they put the brackets, at the end of the paragraph they put the brackets, they put the brackets**, and I keep asking them why you put the brackets at the end of this, every paragraph in the literature review and they put the brackets, **it seems that everything of the whole paragraph refers to that particular person**. So this is something, you know, when students become more and more experienced, you know, they have read more and more papers, journals, they know that, well, this aspect probably relevant to another work of the study, relevant to other works, so they can play within one paragraph. They can play with several, you know different perspectives of the things, and this is what I call it critical, not critical of only one source of thing but also critical in various aspects of the work,

R) You mentioned the word critical many many times, and you know a student when he starts his PhD, he is still fresh, may be even he do not know what will be the topic, so as a supervisor do you expect a student at this stage to be critical?

**S 5)** Well, I think this has something to do with orientation, the orientation of the students, definitely when they come to me, the very first day, and I ask them what do you want to do, so I am a bit cruel instead of saying that Ok, you need to do this and do this, I normally give them a homework. They need to conduct what we call it an active leaning in the area, it is not just about go and find article about this, about this, about this, I really want them to look into the mechanics of the thesis itself, for example, not only that, you know that this is an article, but how is this article relevant to your research problem, how is this article relevant to the methodology, how this article, this is done in the first few weeks of their study. So, when the students sometimes finding me very cruel, but later in the PhD, they started appreciate it, Oh Prof. we learned a lot from you about it, they appreciate it because I tend to be very harsh to my students, you know, [(R )for their benefits)] yeah for their benefits, I keep saying to the students, that I will not get my PhD, but you will get your PhD, but well I do not say that it is 100% success, but the students, they really have to learn about it. And when they ask, when you want it, you want it yesterday, they need to do it very very fast, and I think they learned about it. Then I force them not only to write not only the perspectives of the literature review of their PhD theses but also normally I force them to write the critical survey for journal.

**R)** Now, we come to question four, this is the core of my study, we are talking about the process of citing the information from the original sources, from articles, from PhD theses, from Maters' dissertation, and the way they integrate this information into their literature review, so we have some points and you may add if you have some comments.

**S 5)** Well, I think it is not fair to say Arabs and non-Arabs, you know, I mean it is what I say it, well, I have Arab students which is very very good, at doing these things, not because they are exposed or what ever, because you know this is rather than ethnic, Arab or non-Arab, you know, it is about of their attitude of the working attitude, some of them are very very, you know, I can remember, there is one of my students actually from Iraq, previously, long time ago, he would come to me with a note book, that I think I myself when I did my PHD i never did that he is so tedious, I mean taking tedious things, and put it, I know that, he will not, probably he could not sleep for few weeks he want to write in the A4 paper all things and try to put all mapping of these things, you know, so the effort is put, it is a very very good effort actually try to understanding and try to think then he make it put it here put it here put it here I can link it, this is to this paper and this is to this paper, so this is not about he is an Arab, but then he come up with a very good what he got,, whether you got it about how it is about the contents, or about he feels about the research, how he can put it then he put it, nicely, the things are very very nicely. But, you now, if non-Arab produce non-well even some from who relatively have a better English even, but when the attitude is not at the PhD attitude, he tends to take this process less, you know. Well it is a literature review, sometimes you know it is well um, um well, you know, he just take it less, not, that is the reason. Well, I do not agree if you are saying Oh this is how the Arabs do. There is some Arab students who are very very persistent in doing this in some several cases persistent, read, I do not give certain attention to that, they keep chat with me, keep chatting with me, am I doing the right thing? This is the attitude, this is more about the attitude of the students, not about the ethnic.

**R)** Actually, my aim in my study is to criticize in order to build, in order to help them, yeah, that is my aim, not only to criticize, mine, is where is the problem,

here is the problem, I want to address this problem and present a solution, that is my aim, that is because this is not a critical study, I am looking at the problem, what is the problem, I want to offer a solution for them, because I am an Arab)

S 5) I think for me is their attitude, some students come with a very positive attitude toward it, when they have a very positive attitude and they know what is my expectation, not only what is my expectation, they know that when I ask them to work, Ok, well before you submit your for example survey paper, you need to read a very good journal or whatever, you know, a reputable journal, and I want you to mimic all those journals, and to some of the students, they are really really take my word, and they really really work toward that, try to mimic, try to do. Even I can see you know some cases, you know, they are trying actually instead of putting it one paragraph put it toward the end, you know, they try to synthesis from many sources, , even they are very very very union, but they can do it, so I think if you need to help them in this case , it is actually to give the exposure on how the PhD process. So, they will so they come take the PhD, start the PhD with a positive mentality attitude, it is not about being working hard, but work smart actually to have a good mentality toward having this, you know, persistent you know, perseverance, you know. Sometimes, I do not really look at certain aspects but the students can actually point it out, this is very important for me, and when it is very important, so this is what I want to put it, so that is what I think is very very important.

R) Now, if we come to using the type of the integral or the non-integral, if they have problem in this?

S 5) Yeah, I think for me I think when you use the integral it is a more **high level of thinking** toward that, because one thing is that **they just** , no, no this is my perception, I just, may not be correct, instead of they just **look into one paper**, um, this is the author, um, this is the citation, **let us cite this thing**, put it in the text. But when you tend to be more into the integral part, you know, they actually start to **value the things**, they start to value things more. Again, I do not want to say that Arab are doing this and this, we have certain, I know previous students, Nasser, you know, one of my performing Arab students, form Iraq last time, yeah, he is good because of the work that he did. Yeah, he could synthesize very well, and I was actually naughty normally, and ask them actually, do you know who is who in the work, and if they know actually the people of doing those things, they normally use the integral part, but if they just say oh this paper is important but I do not think i have time to do it, I just glance through it, then just put it in two brackets

R) So, the name of the author has its importance in IT?

S 5) Definitely, it is important, and normally we highlight that you know. It is not the general article, you know, the general article you say that a report is produced by a group of people, that do not have the author for example, you, it does not have the author, as compared to a very good wide paper, actually produced by someone, have the authority in the area. Definitely, the one who has the authority in the area, it explicitly that it means that you somehow looked into the area, and very very specifically,

R) So, now if we come now to the type of processes, Arab students' use of these verbs, like material processes, conducted, analysed.

S 5) Ok, this is, if we relate this to the bloom level, may be at **the beginning of their studies** in order to the **level of thinking is not high**, the author, **it is not of a**

**higher level.** So, they tend to actually say something like that, oh, this one **proposed**, this one **proposed**, **state that**, you know. **Those are not of the level of arguing the work**, you know, the level of judging the works. It is just simply mention the work is done by certain people, and the work for example, **oh this person conducted**, even this person analysed, **but how do you judge it.** So, as they **become more experienced**, and some of the students are very productive, without me asking them to produce papers, even without my instruction, they are very productive, there are some students are very productive, some students event do not write papers, you know, this is what I find, some students are very productive, so the more productive students, they become more higher and higher in terms of, especially when the supervisor come and try to send the paper to this journal, and this journal, you know, become very, you know a very competitive journal, you know, becoming more particular about the work,

**R)** Point C/modal verbs and adverbs to show the attitude of the writer towards the information.

**S 5)** Yeah, well, something let us say, you should, shall, and should, must for example, fortunately, in the IT area, they have a guideline for this, somehow, how to use these words, how, I mean not the guideline I would say, I would say how does, you know, it has the meaning , toward the end of the work, they are words for certain indication, to appreciate the strength of these works. So again we do not want, yeah, it **depends on the works that the students comment** on the work in the paper, but we do not want it to be, you know the word you said **\_may'**, we **cannot accept it** you know, actually

**R)** So, how can a student be critical without using these?

**S 5)** Yeah, that is a good question actually, how when we say critical, they need to actually to have **the understanding**, because it may be true in a more evaluative type of work, that probably in the more qualitative type of work, I would say, but in the area of this quantitative type of work. For example, if you have the simulations, and you know that the outcome of this analysis led to this type of the work, so it is very explicit. And you can decide it clearly right, so your **judgement need to be very sharp**, the judgement need to be very sharp, so if you still to use something like that, you know, possibly it is not, you know. You know, some people are doing wrong, in front of your eyes, you know, in Arabic we call it what, **\_kæ'e'i'**, it is clear, in Arabic we say that Halal is clear and the unhalah is clear. So those in IT work, you know, are more in this clarity type of thing, and in between these two is not really, well, it is there, the fuzzy part of it, but it needs to be stable, **the stance must be clear.**

**R)** Question five: did you give your students feedback on linguistic issues?

**S 5)** Ok, **not all the types**, because for me, I concern on the comprehensiveness, on what purpose that student is writing. For example, when he writes for the proposal at the proposal stage, this is less demanding than when he writes towards the thesis stage. So, this is why Nayef I have a different way of asking students to do, to write the thesis toward, on one month to their PhD, I want them to come up with a PhD thesis like this, that is how you do. That is, they say well how, I say well, you produce a template, everything needs to be in the order, you have chapter one, chapter two, until chapter six. That is you have to have the six chapters, so the six chapters must be there, with the all the look whole, the frames of it. So, when I look into the literature review, I know actually what is the tendency of the student to do, and how the student play. I know, I look for example at the growing list of the references for example, and how the students

get into the mode of reading it, so I normally give the feedback by looking at the whole of the thesis even though the thesis is not complete. It is like building a house, you know. I do not like that, I am not the one that for example, may be for example, some of my friends actually they prefer to, ah, Ok, send me chapter one, send me chapter two, send me chapter three. No, no, no, every time you send me, you have to send a complete chapter one to chapter six, even though chapter six is not complete, but I want to see it, chapter six, all complete even though you have a lot of holes inside, but I want to see it in a comprehensive way. So, I train the students to be, to have the overall view of the thesis rather than to look into chapter one, chapter two, chapter three as well I was trained. Then, because I know that, when I was trained previously, I think the supervisor must doctorate me like that, I want to train the idea of philosophy of begin with the end of month. You know, you need to begin with the end of the month, I know that, it is actually, you want to come up with the thesis, you want to come up with a functional thesis, so it is regard to this. Whether to give the feedback or something like that, it depends on the progress of the students, so when they just say oh this is easy for the proposal defense. And I say that it is Ok, it is for the proposal defense, Ok, you can take out when I agree with everything, you can take out for chapter four, five, six, take only chapter one to three, submit to them. So that is my way, maybe, different from other people, I do not know whether the thesis is good or not but that is how I do it.

R) Actually to come back again to the same question, I mentioned, the citation aspect, using verbs, using modal verbs, using adverbs, I mention these points if you give them feedback or not, on these aspects?

You said that some students put the whole paragraph and at the end they put the name of the author between two brackets, if for example, you have one of your students, did like this , do you give feedback or comment on this?

S 5) Yeah, I have there is one guy from Saudi few years back, he was preparing for sending, preparing a proposal I think, I was out station in the hotel and at 11 o'clock I had , started looking at his thesis, 11 o'clock pm at night. I said now, we keep exchanging at that time, you know whats' app was not at that common, I mean not started yet. He keeps sending me email, so I give it back and then I said, oh it is now 3 o'clock, but most of the things is on that particular issues. So sometimes, I become very serious on this, especially, yeah, the level of language is another thing, when we say Arab students, **some of the Arab students, they do not have language capability to a certain level**, to that level, **but some of them are very good**, they wish to learn, they really want to learn, **they know that they are handicapped**, and they really want to learn,

R) The last questions: How can EFL Arab postgraduates overcome such problems?

You mentioned one of the solution, you said they have to change their attitude towards work, how can PhD Arab postgraduate overcome such problems,

S 5) Well, some students, they take my comments, they take the comments very positively. It is not about taking the comment as me killing them, but I have also Arab students who take it very personally and left their studies you know, well I make a plan, and sometimes, I become very planned. But you know, I would say, good students, yes, sir, I agree with you not because they want to please me but they really learn. You know, but they take consecutively, some students, they do not, ok, this is what I said back to the attitude. Sometimes you know, how they are willing to be corrected and some students when I say the Saudi students, you

know, he is very willing, you know, I mean we keep exchanging you know, sometimes we become very very tense. You keep say, up to the point, you do sometimes, you lose the temper, I keep telling you several times, but you still doing this, you still do this. Sometimes, you come to that level, but to that students, they know how to react, you know. And some students say, oh, I am taking your time and you are, and it is almost two o'clock in the morning or three o'clock in the morning. So, I think, we need to continue, at that time, I was still very very actively charge, I say I do not get tired as long as you produce the correct work that I really want .

Thank you so much for participating in the study.

