

## The Rhetorical Structure of Introduction Sections in Egyptian and International Research Articles in Dentistry

Mai Ashraf<sup>1</sup> Shaker Rizk<sup>2</sup> Neveen Galal-Eldin<sup>3</sup>

### Abstract

The current paper aims at investigating the generic structure of the introduction sections of research articles (RAs) written by Egyptian and international researchers in the field of dentistry. To this end, a sample of 50 RA introduction sections were selected from Egyptian and international journals between 2014 and 2021. The study adapted Create a Research Space (CARS) model suggested by Swales' (2004) in combination with Sheldon's (2011) eight sub-steps of Move1. Both qualitative and quantitative techniques were deployed to analyze the selected data. Findings showed similarities and differences between the two groups where Move1 was found to be the most frequent move within the two datasets. However, this move was the only obligatory one in the Egyptian corpus, whereas the three moves were classified as obligatory in the international subset. The present paper contributes to pedagogy helping Egyptian and novice researchers to write more effective RA introduction sections. It also contributes to a better comprehension of the rhetorical move structure of the introduction section through employing an integrated approach of both Swales' (2004) and Sheldon's (2011). In addition, using large corpora makes the findings of the study more reliable.

**Keywords: Introduction section, research article, rhetorical structure, dentistry**

---

<sup>1</sup> Department of English, Fayoum University.

<sup>2</sup> Professor of Linguistics, Faculty of Arts, Suez Canal University

<sup>3</sup> Lecturer in Linguistics, Faculty of Arts, Fayoum University

## 1. Introduction

Analyzing the different sections of RAs has been one of the crucial issues which has received growing attention in genre analysis studies because universities nowadays ask researchers to publish their researches in high ranking international journals for graduation or for getting an academic degree or promotion (Mustaine& Tewksbury, 2016; Flowerdew& Wang, 2016). Swales and Feak (2004) point out that each section of RAs have their own conventional written patterns. Being aware of these conventions enable writers and scholars to develop more effective writing of RAs. Consequently, examining the rhetorical organization of RAs' different sections is necessary.

Moreover, some linguists (e.g. Swales, 1981, 1990; Swales & Feak, 2000, 2004; Armağan, 2014; Fazel, 2019) have stated that the introduction section is one of the challenging sections that researchers have to write. For one thing, in this section, the writer has to present some background information about the investigated topic in a logical way. Secondly and most importantly, it is like a map which directs the reader towards the other sections of the RA. Therefore, it should attract the reader's attention by creating interest in the investigated topic. Third, as Wannaruk and Amnuai (2015) point out, what makes writing the introduction section difficult is lack of genre knowledge. Fourth, Alton-Lee, (1998) and Flowerdew (2001) point out that that section is one of the sections criticized sharply by reviewers and journal editors while examining articles for publication as " some people just recite a number of previous publications and don't have a purpose or a point to it" (Flowerdew, 2001, p.136).

### 1.1 Objectives of the Study

The current study analyzes 50 Research Article Introductions (RAIs) written by native and non-native English speakers in the field of dentistry with the aim of examining the rhetorical structure of these introductions. It also seeks to make a comparison between the two groups of introductions in terms of using the moves and steps suggested by Swales' (2004) model.

### **1.2 Significance of the Study**

This study integrates Swales' CARS model (2004) and Sheldon's (2011) eight sub-steps of move1. This integrated approach increases the significance of the present study to the body of literature. In addition, the study seeks to help teachers and academics raise their students' awareness of the conventions of writing the introduction sections.

### **1.3 Research Question**

The current paper seeks to answer the following research question:

- How are rhetorical moves and steps used in the introduction sections of Egyptian and international RAs in the field of dentistry?

## **2. Theoretical Framework**

### **2.1 Genre Analysis**

Swales (1990) and Bhatia (1993) view a genre as a group of communicative events determined by some communicative purposes decided and agreed upon by its community members. These purposes determine the schematic structure of a text and affect the content and linguistic style of this text. Genre analysis is a method for investigating the rhetorical moves and linguistic features that form the genre seeking to comprehend the communicative purpose which that genre conveys

(Bhatia, 2012). Therefore, genre analysis studies are crucial for apprentice writers as they enable them to identify the different moves and steps of the genre, and their linguistic realizations (Bhatia, 1997). Moreover, those studies help those writers develop their creative ability to produce high-quality pieces of writing. Consequently, as Hyland (2000) puts it, genre analysis is a pedagogical tool aiming to explore the writing conventions of academic genres.

## **2.2 Move Analysis**

According to Swales' (2004), a move is a "rhetorical unit which performs a coherent communicative function in a written or spoken discourse" (p.228). Moves are identified by a single clause or by several sentences or paragraphs (Swales& Feak, 2000). Parodi (2010a) describes move analysis as dividing the text into segments; each segment expresses an idea and performs a certain function helping accomplish the overall purpose of the genre.

In addition, Moves are realized through different steps which can be defined as sub-units or more detailed textual elements utilized to realize the communicative purpose of the move (Dudley-Evans and John, 1998). In addition, moves and steps are divided according to the percentage of their occurrence into three types: obligatory, prototypical and optional. Obligatory moves and steps appear in 100% of the investigated texts whereas the optional ones appear in more than 50% of the samples. When the percentages of occurrence of moves and steps are less than 50% of the samples, they are called prototypical (Henry& Roseberry, 1999)

### **2.2.1 Swales' (1990) and (2004) for Move Analysis of the Introductions**

Swales' (1990) suggested a model called CARS (Create a Research Space) model to analyze the generic structure of the introduction sections. This model consists of three moves which should be followed by a RA writer while writing the introduction section. Those moves are *establishing a territory*, *establishing a niche* and *occupying the niche* and each move is divided into steps. Move1 aims to provide the reader with some background information on the topic under investigation, to show the centrality of the research field and to summarize the findings of previous studies (Swales& Feak, 2004). This move consists of three steps: claiming centrality, making topic generalization, and reviewing previous research. Move 2 shows the areas which have been neglected by previous research and provides justification related to conducting the research under investigation or why the investigated study selects particular methods or approaches. This move is composed of just one step, but it is divided into A (countering claim), B (indicating a gap), C (question arising), and D (continuing tradition). Move 3 seeks to indicate the purpose of the investigated study, its structure and possible outcomes and it consists of three steps.

In 2004, Swales made considerable modifications to the old version of his model. The first modification is that Move1 was reduced into one step (*topic generalization of increasing specificity*). The second modification is that M2, step1 A, B, and C (*counterclaiming, indicating a gap, question-raising*) of the older model was reduced into one: Step 1A (*indicating a gap*). In addition, M2, step 1 D was changed into *adding to what is known*. Also, in 2004 version, a new optional step was added to M2 (*presenting positive justifications*). Third, Move3 was

called occupying the niche in the older version while it was relabeled as presenting the present work in 2004 version. In addition, there were some steps which were added to Move3. Therefore, in the new version, Move3 is composed of seven steps: one obligatory, three optional and three steps which can be found in just some fields. The difference between the two versions is shown clearly in table1.

**Table 1**

*The difference between Swales' (1990) CARS model and his 2004 Revised version*

Swales' (1990) CARS model	Swales' (2004) Revised model
<b>Move 1 Establishing a Territory</b>	<b>Move 1 Establishing a Territory</b>
<b>Step 1</b> Claiming centrality <b>Step 2</b> Making topic generalization(s) <b>Step 3</b> Reviewing items of previous Research	Topic generations of increasing specificity
<b>Move 2 Establishing a Niche</b>	<b>Move 2 Establishing a Niche</b>
<b>Step 1A</b> Counter-claiming <b>Step 1B</b> Indicating a gap <b>Step 1C</b> Question-raising <b>Step 1D</b> Continuing a tradition	<b>Step 1A</b> Indicating a gap <b>Step 1B</b> Adding to what is known <b>Step 2</b> Presenting positive justification

<p><b>Move 3 Occupying the Niche</b></p> <p><b>Step 1A</b> Outlining purposes</p> <p><b>Step 1B</b> Announcing present research</p>	<p><b>Move 3 Presenting the Present Work</b></p> <p><b>Step 1</b> Announcing present research Descriptively and/or purposively</p> <p><b>Step 2</b> Presenting research questions or hypotheses</p>
<p><b>Step 2</b> Announcing principal findings</p> <p><b>Step 3</b> Indicating RA structure</p>	<p><b>Step 3</b> Clarifying definitions</p> <p><b>Step 4</b> Summarizing methods</p> <p><b>Step 5</b> Announcing principal outcomes</p> <p><b>Step 6</b> Stating the value of the present Research</p> <p><b>Step 7</b> Outlining the structure of the paper</p>

### 3. Literature Review

Many studies have employed Swales' (1990) model to analyze the introduction sections /chapters in different disciplines. For instance, Samraj (2002) utilized that model to analyze 24 RAIs of two fields, wildlife behavior and conservation biology. She found that Swales' (1990) model was inadequate and some steps needed to be added. For example, positive justification should be a step in move2 as the writers of wild behavior sometimes provided justifications of conducting their research.

In Parallel with Samraj's (2002) study, Ozturk (2007) employed Swales' (1990) to explore the differences between the rhetorical organization of 20 RAIs in two sub-disciplines of applied linguistics: Second Language Acquisition (SLA) and Second Language Writing (SLW). He has found that most SLA writers (60%) used the move sequence followed by Swales' (1990) model: M1-M2-M3 where M stands for move. On the other hand, SLW researchers did not adhere to

Swales' (1990) move structure as only one out of 10 RAIs in the corpus followed the sequence of CARS model. He also found that the predominant sequence in SLW sub-discipline was M1-M2-M1-M3 and M1-M3.

Similarly, Shirani and Chalak (2016) analyzed the rhetorical organization of the introduction section of 40 master theses written by Iranian EFL in order to determine how much the Iranian students follow Swales' (1990) CARS model. Their findings showed that Iranian learners' M.A. theses followed Swales' (1990) exactly. Move1 appeared in 28 out of 40 theses and thus it was a prototypical move in writing the introduction section for master students. However, 26 theses utilized move2 in their study whereas the other 14 theses did not employ move2. Regarding move3 it appeared in most of the theses and thus it was an obligatory move. Other studies depended on Swales' (2004) model such as Stoller and Robinson (2013) who examined the organizational move analysis of chemistry RAIs. They referred to previous studies in order to establish a territory (move1). With respect to move 2, they found that the most used step was indicating a gap and it was used in all the articles investigated. Regarding move3, their findings showed that the predominant steps were step 1 (announce present research descriptively/purposively) and step 5 (announcing principal outcomes). The least used step was step2 (presenting research questions or hypotheses) whereas step7 (outlining the structure of the paper) was not used at all.

Similarly, Geçikli (2013) has investigated the move pattern of Turkish and English PhD thesis introductions in the field of English Language Teaching (ELT). The findings of his study have revealed that



move1 was obligatory within both corpora. Also, authors of the English introductions had a tendency to indicate a gap in the previous research whereas in the Turkish corpus, authors did not have any tendency for establishing the niche.

Afshar, Doosti and Movassagh (2018) also have studied RAIs of Applied Linguistics (AL) and chemistry in an attempt to explore variations in the move structure of the introduction section of the two fields selected. They have found that there were some variations in using the steps. For example, gap indication was used in most of the ALs RAs, but only in half of the Chemistry RAs. In addition, move3, step 1 (announcing present work descriptively and/or purposefully) was employed by all the chemistry researchers whereas it was incorporated in 86.53% of ALRAIs.

Unlike the previous two studies, Lim (2012) analyzed 30 management RAIs using Swales' (1990, 2004) models. He found that most articles included the three moves of Swales' (1990, 2004) model. He noticed the frequent use of move2, step1A and emphasized the importance of using both steps of move2. He added that move2, step 1B is required to emphasize the need to conduct their research. He also stressed the centrality of using step 2 of move3 (presenting research questions or hypotheses).

The above-mentioned studies adopted either Swales' (1990) or Swales' (2004) framework to analyze the rhetorical structure of their introductions. However, none of them applied Swales' (2004) model in combination with Sheldon' (2011) eight sub-steps of move1. The current study seeks to fill in this gap integrating both Swales' (2004) framework and Sheldon's (2011) sub-steps of move1 to identify the

similarities and differences between the selected RAIs in terms of generic structure.

## **4. Methodology**

### **4.1 Research Design**

The current study adopts both quantitative and qualitative techniques for data analysis. The Quantitative method is used to count the frequencies of the moves and steps within both datasets while the qualitative approach is used to discuss the quantitative findings in detail and provide interpretations.

### **4.2 Data Collection**

The corpus of the study consists of 50 dentistry RAIs: 25 were taken from prestigious Egyptian journals according to the Supreme Council of Universities and 25 were taken from international journals registered in Journal Citation Reports in Clarivate analytics.

### **4.3 Procedures**

Only the introduction sections were extracted from the selected RAs and coded as Egy 1-Egy 25 for the Egyptian dentistry dataset and international dentistry as Int 1- Int 25. The introduction sections were analyzed and compared across both datasets and the analysis was conducted in two stages. First, the selected data was analyzed qualitatively adapting Swales' (2004) CARS model to investigate the rhetorical organization of the two samples in terms of moves and steps. Each move was analyzed in terms of communicative function and frequency of occurrence. Also, the steps of each move were identified and their percentages were compared within the two datasets. The second stage includes analyzing the data quantitatively

where the instances and percentages of each move and its subsequent steps were counted.

#### 4.4 Model of Analysis

This study presents a considerably modified version of Swales' (2004) Create- A- Research -Space (CARS) model and the reason for choosing Swales' (2004) model is that it is more detailed and comprehensive than that of 1990. Sheldon's (2011) eight sub-steps of move1 was also adapted in the current study since the only step of M1 in Swales' (2004) model seems to be quite overgeneralized. Table 2 illustrates Sheldon's (2011) original sub-steps of M1.

**Table2**

*Original sub-steps of M1 suggested by Sheldon (2011)*

#### **Step1 Topic generalization of increasing specificity**

- A Reporting conclusion of previous studies
- B Narrowing the field
- C Writer's evaluation of existing research
- D Time-frame of relevance
- E Research objective/process previous studies
- F Terminology/definitions
- G Generalizing
- H Furthering or advancing knowledge

Sheldon (2011, p.243)

#### 4.4.1 Modifications in Swales' (2004) Steps and Sub-steps

Firstly, the researcher views that *claim centrality* employed in Swales' (1990) should be the first step of M1 in the adapted model of the current study since it determines the research area as significant and

worth investigating. Therefore, showing the importance of a research area is indispensable step in move1. *Topic generalization of increasing specificity* employed in 2004 version is the second step of M1 in the present study and it includes seven sub-steps.

Secondly, the third sub-step in Sheldon's (2011) framework (*Writer's evaluation of existing research*) is rephrased as (*Writer's positive evaluation of existing research*). It is noteworthy that the researcher, at the beginning, divided this sub-step into a) *positive evaluation* and b) *negative evaluation*. Then, sub-step b (*negative evaluation*) is omitted. The reason for omitting sub-step b is that the evaluation is either positive or negative and if there are negative comments, this sub-step will be the same as step1.A of M2 (indicating a gap). In order not to repeat some steps or sub-steps, the adjective *positive* only is added

Thirdly, the fifth sub-step of Sheldon's (2011) model (*research objective/process previous studies*) is deleted in the current study and merged in the first sub-step rephrasing it as "*referring to previous studies objectives/procedures/findings*". There are no modifications in the steps of M2. As for M3, two modifications were made in the current study. The first one is that step3 (*definitional clarifications*) is omitted as it has the same function as sub-step E (*terminology/definitions*). Therefore, summarizing methods will be step3 and so on. The second one is that step 6 (*stating the value of the research*) which will be step 5 in the current study is rephrased as *highlighting research contribution/significance* as the new clause is better and more convenient than the old one of Swales' (2004) model. Based on the

above modifications, the adapted model in this study is clarified in table 3.

**Table 3**

*The adapted model in the current study*

<b>Move 1</b>	<b>establish a territory (citations required)</b>
Step1	<i>claiming centrality</i>
Step 2	Topic generalization of increasing specificity (obligatory)
	<ul style="list-style-type: none"> <li>• Sub-step A Narrowing the field</li> <li>• Sub-step B Writer's <i>positive</i> evaluation of existing research</li> <li>• Sub-step C Time-frame of relevance</li> <li>• <i>Sub-step D Referring to previous studies Objectives /Procedures /findings</i></li> <li>• Sub-step E Terminology/definitions</li> <li>• Sub-step F Generalizing</li> <li>• Sub-step G Furthering or advancing knowledge</li> </ul>
<b>Move 2</b>	<b>establish a niche (citations possible)</b>
Step1A	indicating a gap, or
Step 1B	Adding to what is known
Step 2 (optional)	Presenting positive justification
<b>Move 3</b>	<b>presenting the present work (citations possible)</b>
Step1	Announcing present work descriptively/purposively (obligatory)
Step 2	Presenting research questions or hypotheses (optional)
Step3	Summarizing methods (optional)

Step 4 Announcing principal outcomes (PISF)
Step 5 <i>Highlighting research contribution/significance</i> (PISF)
Step 6 Outlining the structure of the paper (PISF)

Modifications are in italics

As can be seen from table 3, M1 in the present study consists of two steps and the second step involves seven sub-steps. M2 is composed of two steps. M3 includes one obligatory step, two optional steps as well as three steps which can be found in just some fields.

The following section focuses on analyzing the rhetorical organization of the selected Egyptian Dentistry Research Article Introductions (EDRAIs) and International Dentistry Research Article Introductions (IDRAIs) based on Swales'(2004) CARS model.

## 5. Data Analysis

### 5.1. A Qualitative Analysis of Moves and Steps of DIRAIs and DERAIs

#### 5.1.1 Move 1. Establish A territory

##### 5.1.1.1 Claiming Centrality

In addition to highlighting the significance of research, this sub-step describes the topic briefly (important, complex) without any details. Two examples are presented from the international and Egyptian corpora, respectively.

- (1) *Implant surgery* has become *a standard procedure...* due to edentulism, trauma or ablative surgery. With *increasing demand*, different approaches have been proposed (DIRA#1, sentence no.#1).

The writers of DIRA1 describe dental implant as a standard procedure. They also assure the centrality of this implant by showing some dental problems such as ablative surgery, trauma, or edentulism which lead to the increasing demand for that procedure. Another example is taken from the Egyptian sub-corpus:

(2) Cosmetic dentistry ... the topic has become *important* for orthodontists (DERA#17, sentence no.#1).

Similarly, the writers of DERA 17 refer to the centrality of cosmetic dentistry for orthodontists implying that it deserves investigation.

#### 5.1.1.2 Narrowing the Field

In this sub-step, the writer narrows the focus of his research by moving from general points to more specific ones. The next excerpt from the international corpus illustrates using it,

(3) *Laboratory testing* is an important ... method of diagnosis ... human diseases. Some chronic diseases, such as *cancer*, may have progressed to intermediate or advantaged stages ... Early diagnosis may be facilitated by ... (DIRA#12, sentence no.#1-3)

In the above mentioned example, the writers begin the paragraph with speaking generally about the importance of laboratory testing for diagnosis of human diseases. Next, they specify a certain disease which is cancer, and start talking about it highlighting the significance of earlier diagnosis of this disease.

Also, *narrowing the field* has been used in the Egyptian corpus as it is shown in the coming quote,

(4) *Dental anomalies* are deviations from the normal tooth form, number, function ... Anomalies in the normal number of teeth include either supernumerary teeth ... or hypodontia ... Supernumerary tooth is any tooth extra than the normal number of teeth ... (DERA#5, sentence no.#1:4).

In the above extract, the writers introduce the main topic of the RA which is *erupted supernumerary teeth* by providing some background information about dental anomalies in general. Then, the writers start to give more specific information talking about anomalies in the number of teeth whether by increasing or decreasing. After that, the writers provide the readers with some accurate information about supernumerary tooth. Therefore, the writers moved gradually from the general to the more specific.

#### 5.1.1.3 Writer's *Positive Evaluation of Existing Research*

This sub-step presents the writer's opinion about the previous studies. It can be realized through positive writer's comments on a theory or a phenomenon described in previous studies. The following excerpts indicate positive evaluation from both sub-corpora:

(5) Greenstein and Tarnow (2006) ... proposed a *safety zone* of 4 mm to account for the additional drill length. This allows planning of the implant placement to be so precise that it can avoid damage to the IAN (DIRA#3, sentence no.#31-32).

The second sentence in the above example in addition to the adjective 'safety' are positive comments to describe Greenstein and Tarnow's (2006) proposition. That is, 4 mm has the advantages of



precisely planning the implant placement and avoiding damage to the inferior alveolar nerve (IAN). The example below shows using this sub-step in the Egyptian sample:

- (6) More recent literature has investigated placement into sites exhibiting periapical pathosis with *successful outcomes* (DERA#21, sentence no.#7).

Here, describing the previous studies' outcomes as successful represents a positive comment.

#### 5.1.1.4 Time Frame of Relevance

In this sub-step, the writers try to connect a phenomenon with a specific period of time. The following two excerpts illustrate using this sub-category in the international and Egyptian sub-corpora, respectively:

- (7) *In the past decade*, there is a growing interest in ... oral health (DIRA#16, sentence no.#8).

- (8) *Recently*, the search for genetic markers ... has been receiving significant attention (DERA#2, sentence no.#7).

#### 5.1.1.5 Referring to Previous Studies Objectives/Procedures/Findings

The writer in this sub-category refer to the objectives or procedures or results of individual studies. This sub-step is used in the international corpus as shown from the following extract:

- (9) ... *Anitua et al.* highlighted the important effect of the implant diameter..., and concluded that the use of wider implants may be ... *Eazhil et al.* reported findings in this regard ... and observed how the equivalent Von Mises stress is concentrated ... (DIRA#4, sentences no.#9-11-15).

The writers, in the above example, refer to the previous studies procedures and findings reporting on a number of studies that observed the impact of the implant diameter on the biomechanics of single-crown restoration using a finite element analysis. Another example is taken from the Egyptian corpus,

(10) *Keser and Dibart* in 2013, introduced ... PzC technique... *Alikhani et al.* in 2013 tried MOP clinically ... and found that MOP increases rate of TM ... *Hoogeveen et al.* in 2014 conducted a systemic review ... and concluded that there was a low to moderate quality ... (DERA#12, sentences no.#9-11-12)..

Here, the writers provide instances of the previous studies that applied micro-osteoperforation (MOP) and piezocision (PzC) for acceleration of tooth movement (TM) as their theoretical framework. The writers also compare between the two methods discussing in detail the results of the previous studies.

#### **5.1.1.6 Terminology/Definitions**

In this step, the writer discusses the terms which will be adopted in his study in order to get the reader familiar with them. It is used in the international corpus, as shown in the next extract,

(11) Peri-implant soft tissue recession *has been defined as an apical shift of soft tissue margin ... (DIRA#23, sentence no.#3).*

The following segment is an example of this sub-step from the Egyptian subset,

(12) Postoperative pain *is defined as* the sensation of discomfort after endodontic intervention... (DERA#4, sentence no.#1)

#### **5.1.1.7 Generalizing**

The writer here presents some general information related to the investigated topic. The next two quotes demonstrate using it:

(13) During treatment with fixed orthodontic appliances there is an increased risk for patients to develop caries lesions ... (DIRA#9, sentence no.#1).

As it appears in the above example, the writers of DIRA9 introduce their topic talking about caries lesions in general. Following is another example from the Egyptian corpus,

(14) The development of white spot lesions (WSLs) is a common side effect of fixed orthodontic appliance treatment... (DERA#11, sentence no.#1-2).

In the above example, the writers speak generally about white spot lesions which occur after orthodontic appliance.

#### **5.1.1.8 Further or Advancing Knowledge**

This sub-step seeks to provide the reader with suggestions to solve existing problems. Here are two extracts from the two groups:

(15) ... two treatment *approaches are proposed* for the restoration of carious primary teeth ...; the conventional and the biological\_ (DIRA#14, sentence no.#8).

(16) *Two major approaches* are generally *recommended* to patients for the removal of plaque from their dentures... *mechanically or chemically...* (DERA#9, sentence no.#28-29).

#### **5.1.2 Move 2 Establish A niche**

### 5.1.2.1 Step1A: Indicating A gap

It aims to show that the previous studies are inadequate and it includes contradictory findings. Two examples are provided from the two datasets for more illustration:

(17) ... most of previous studies investigating ... PDL cells ... are in vitro studies and focused on the relationship between ... *while few* examined the mechanism between PDL fibroblasts and stimulation of osteoclastogenesis (DIRA#11, sentence no.#18)

In the previous example, scarcity is demonstrated where few studies conducted for examining the mechanism between periodontal ligament (PDL) fibroblasts and stimulation of osteoclastogenesis.

Another instance from the Egyptian sample is as follows:

(18) Several studies compared resin infiltration to bleaching ... However, *there is no* direct comparison between the effect of resin infiltration and bleaching on WSLs. Moreover, *the results were not always consistent* (DERA#11, sentence no.#20-21).

The writers of DERA11 present the deficiencies of previous studies where they neglected the comparison between the effect of resin infiltration and bleaching on white spot lesions (WSLs). The second deficiency is related to the results.

### 5.1.2.2 Step1. B Adding to What Is Known

This step aims at stating the specific area of research which needs to be investigated, as shown in the following excerpt:

(19) Thus, investigation of new dental gypsum in comparison to other products *is needed* to prove its clinical effectiveness ... (DIRA#24, sentence no.#11).

(20) CAST index is a new promising index ... So, *further studies are needed* to confirm its usefulness ... (DERA#10, sentence no.#17).

### 5.1.2.3 Step 2: Presenting Positive Justification

This step accounts for adopting previous method or model in the investigated research due to its reliability. The forthcoming instances show using this step:

(21) ... metatranscriptomic analysis characterises ... This approach *allows for* the assignment of activities to specific organisms ... *Metatranscriptomics* ... has been extremely informative in *providing new insights* into microbial functions... In the present pilot study, *we used metatranscriptomic analysis* to characterise bacterial activities ... (DIRA#13, sentence no.#14-18).

As it appears in the above example, the writers highlight the points of strength of metatranscriptomic analysis shown in italics above to justify adopting this approach in their study.

Another quote is from the Egyptian sub-set:

(22) Dental treatment under *general anesthesia (GA)* may be required to deliver *effective treatment* for dental caries when other ... techniques fail... GA enables *high-quality dental care*... It offers *a fast, safe, comfortable and convenient method* for both the patient and the dentist (DERA#16, sentence no.#18:20).

In this example, the writers justify using *general anesthesia (GA)* technique in dental treatment through providing some of its advantages.

### 5.1.3 Move 3 Presenting the Present Work

### 5.1.3.1 Step1 Announcing Present Work Descriptively/Purposively

[

This step states the aims of the study and its main focus. For instance:

(23) Then, *the aim of this study was* to search for association of ... (DIRA#22, sentence no.#12).

The following example is taken from DERAIs:

(24) ... *the aim of the current study is* to evaluate and compare the dentinal tubules occluding capacity ... (DERA#7, sentence no.#28).

### 5.1.3.2 Step2 Presenting Research Questions or Hypotheses

This step presents the questions which the study under investigation seeks to answer or the hypotheses it intends to test. The examples below exemplify the use of this step:

(25) The specific *research questions were*:

- Does placement of a 2-unit cantilever RRB improve ...?
- Are there any differences in OHRQoL ...? (DIRA#8, sentence no.#18).

The upcoming example is from the Egyptian sample:

(26) The null *hypothesis* of this study was that, there is no improvement of the OHRQoL of CSHCN ... (DERA#16, sentence no.#29).

### 5.1.3.3 Step 3 Summarizing Methods

In this step, the writers explain briefly the methodological procedures they are going to use in their study. The following extracts exemplify using this step:

(27) In the present study, we *used* metatranscriptomic analysis to characterize bacterial activities ... (DIRA#13, sentence no.# 18).

The example below from the Egyptian sample demonstrates the use of this step:

(28) In the current study, innovative regenerative endodontic techniques *were adopted* making use of the (i-PRF) forming a scaffold ... (DERA#8, sentence no.# 9).

#### **5.1.3.4 Step 4 Announcing Principal Outcomes (PISF)**

This step summarizes the findings of the current research and it can be realized through some nouns like 'results', 'findings' and verbs like 'reveal', 'show'. It is noteworthy that this step does not occur in the Egyptian sample whereas it occurs in the international one. Following is an instance from the international sub-corpus:

(29) Our *results indicated that* the protease spectrum of oral cancer was markedly distinct ... (DIRA#12, sentence no.# 18).

#### **5.1.3.5 Step 5 Highlighting Research Contribution/Significance**

This step discusses the significance of the study or its contribution. It does not appear in the Egyptian sample while it occurs only two times in the international one. Following is one of them:

(30) Thus, the analysis of the salivary protease spectrum *may be useful* ... to ... diagnose oral cancer during the evaluation of the health status of the oral cavity (DIRA#12, sentence no.# 19).

#### **5.1.3.6 Step 6 Outlining the Structure of the Paper**

This step aims at highlighting the organization of the whole paper. It does not occur neither in the international nor in the Egyptian corpus.

## 5.2 A Quantitative Genre Analysis of DIRAIS and DERAIs

This section aims at identifying and comparing the distribution of moves and their subsequent steps and sub-steps within the two samples. The frequency counts refer to the most used moves and steps while the percentages of the moves help classify them as obligatory, prototypical, or optional.

### 5.2.1 Move Distribution across Both Sub-sets

The following table illustrates the difference between the frequency of moves and percentages in both subsets.

**Table 4**

*Frequency of occurrence of the three moves in DERAIs*

DERAIs	The Three Moves		
NO. of DERA	Move1	Move2	Move 3
DERA1	4	2	1
DERA2	7	0	3
DERA3	5	2	1
DERA4	6	2	0
DERA5	3	1	0
DERA6	5	0	1
DERA7	6	2	1
DERA8	4	1	1
DERA9	4	1	1
DERA10	6	2	0
DERA11	5	1	1
DERA12	4	0	1



DERA13	6	2	1
DERA14	5	1	1
DERA15	7	1	1
DERA16	5	2	2
DERA17	4	1	1
DERA18	6	1	2
DERA19	5	1	1
DERA20	4	2	1
DERA21	5	1	0
DERA22	4	1	0
DERA23	5	0	0
DERA24	6	0	1
DERA25	5	0	1
Total no. of move instances	123 (71.1%)	27 (15.6%)	23 (13.3%)
Total no. of RAs using the move(%)	25 (100%)	19 (76%)	19 (76%)

As shown in table 4, move 1 (establish a territory) appears in all DERAIs (100%) while move 2 (establish a niche) and move3 (presenting the present work) do not appear in all of the introductions. That is, both M2 and M3 appear in 19 articles (76%) and absent from 6 articles. These percentages reflect the importance of move1 for the Egyptian researchers in dentistry and indicate that only M1 is found to be obligatory in the Egyptian corpus whereas Move2 and Move3 are prototypical representing 76%. In addition, the disappearance of moves 2 and 3 in some Egyptian articles indicate the Egyptian writers' deviation from Swales' (2004) model. Furthermore, that absence shows how the writers for Egyptian journals neglect some important elements

such as *announcing principal outcomes* and *highlighting research contribution/significance* while writing the introduction section. This shortcoming may reflect one of the obstacles that hinder the Egyptian writers from publishing internationally.

**Table 5**

*Frequency of occurrence of the three moves in DIRAIs*

DIRAIs	The Three Moves		
No. of DIRA	Move1	Move2	Move 3
DIRA1	9	2	2
DIRA2	5	2	2
DIRA3	7	5	2
DIRA4	9	2	1
DIRA5	6	1	2
DIRA6	5	2	2
DIRA7	6	2	1
DIRA8	4	3	2
DIRA9	5	2	2
DIRA10	4	2	1
DIRA11	5	2	3
DIRA12	5	2	2
DIRA13	3	3	1
DIRA14	5	1	1
DIRA15	6	1	2
DIRA16	7	1	1
DIRA17	6	2	1
DIRA18	9	2	1
DIRA19	7	1	2
DIRA20	7	2	1
DIRA21	5	2	1

DIRA22	5	3	1
DIRA23	5	2	2
DIRA24	4	2	2
DIRA25	6	2	1
Total no. of move instances	145 (62.8% )	47 (20.3%)	39 (16.9% )
Total no. of RAs using the move(%)	25 (100% )	25(100% )	25 (100% )

Table 5 shows that unlike the Egyptian dataset, all the introduction sections of RAs published in the international journals involve Swales'(2004) three moves (establish a territory, establish a niche, presenting the present work) and therefore they are more likely to agree with Swales' (2004) model than those published in the Egyptian journals. The variation between both groups in terms of move2 and move3 shows that the writers of the international RAIs are more aware of the introduction section writing conventions and rhetorical structure than their counterparts in the Egyptian sample. The percentage of occurrence of the three moves refers to the variation between the two datasets where all the moves are found to be obligatory in the international sample.

Furthermore, similar to the Egyptian sample, the high frequency occurrence of move1 compared to the lower frequency of move2 and move3 within the international sub-corpora indicates that move 1 is the most favored move unlike move3 which is the least frequent one across both datasets. Moreover, tables 4 and 5 reveal that the rate of using the three moves in the international sample is much more than the Egyptian

one (231 vs. 173). Also, the frequency occurrence of move2 and move3 in the international sub-corpus doubles their frequency occurrence in the Egyptian one. This difference can be ascribed to the different sizes of both datasets.

## 5.2.2 Step Distribution across Both Datasets

### 5.2.2.1 Steps of Move 1

Table 6 shows that the total number of occurrences of the steps of move1 in the international corpus is 142 and in the Egyptian one is 123.

**Table 6**

*Frequency of occurrence of M1 steps within both sub-corpora*

Steps of move1	No. of instances		No. of RAIs	
	<b>Egyptian</b>	<b>inter</b>	<b>Egyptian</b>	<b>Inter</b>
Step1.1	6	3	5	3
Step2A	22	18	19	14
Step2B	2	2	2	1
Step2C	9	6	6	4
Step2D	28	46	20	21
Step2E	13	11	12	10
Step2F	35	51	25	25
Step2F	8	5	7	5
Total	123	142		

As shown in the table 6, sub-step F (*generalizing*) is the most frequently used sub-step within both datasets, followed by sub-step D (*Referring to previous studies Objectives /Procedures /findings*). The high frequency of these two sub-steps compared to the other ones indicate that move1 is mainly realized through them. They are followed by sub-step A (*narrowing the field*), sub-step E (*terminology/definitions*), sub-step C (*time-frame of relevance*), and

sub-step G (*further knowledge*). Step1.1 (*claim centrality*) and sub-step B (Writers' positive evaluation of existing research) represent the least frequent steps in the two subsets. The findings show that both samples include one obligatory sub-step (F), two prototypical sub-steps (A, D), and five optional ones, step 1 and four sub-steps (B, C, E, G).

#### 5.2.2.2 Move 2 Steps.

Table 7 reveals that 27 occurrences of steps of move2 are identified in the Egyptian dataset and 51 occurrences are identified in the international one.

**Table 7**

*Frequency counts of move2 steps within the two samples*

Steps of move 2	No. of instances		No. of RAIs	
	<b>Egypti an</b>	<b>internation al</b>	<b>Egypti an</b>	<b>Internation al</b>
Step1. A	15	31	14	22
Step1 B	2	2	2	1
Step2	10	18	9	15
Total	27	51		

As the table shows, step 1A (*indicating a gap*) is the most dominant step in the two subsets, followed by step 2 (*Presenting positive justification*). The high frequency of step 1A and step 2 indicate that they are the most realization of M2 and reflect the importance of these two steps as the first one is concerned with highlighting the

research gap either by expressing scarcity of the previous studies in relation to a specific issue or by criticizing the literature. The second one shows the reason for selecting a particular theory or method. As for, Step 1B (*adding to what is known*), it represents the least frequent sub-step in both corpora. It is noteworthy that the occurrence rate of move 2 steps in the Egyptian sample is much less than their occurrence in the international one. This reflects the Egyptian writers' lack of awareness concerning the conventions of writing RAIs and the advanced training of the international writers to use the higher cognitive skills of analysis, critique and synthesis required by M2 steps.

The two subsets share resemblance in light of the distribution of step1.A (gap) and Step 1 B (*adding to what is known*) where the former is classified as prototypical in both sub-corpora and the latter is classified as optional in both of them. Regarding step2, it is prototypical in the international sample, but is optional in the Egyptian one. None of the steps are obligatory in the both samples.

### **5.2.2.3 Move 3 Steps**

The analysis shows that the total number of occurrences of steps of move3 in the Egyptian dataset is 21 and in the international sub-corpus is 40. Table 8 shows the frequency of each step of move3 in the two datasets.

**Table 8**

*Frequency counts of move3 steps in both datasets*

Steps of move3	No. of instances		No. of RAIs	
	<b>Egyptian</b>	<b>inter</b>	<b>Egyptian</b>	<b>Inter</b>
Step1	16	21	15	20
Step2	3	9	2	9
Step3	2	7	2	7
Step4	0	2	0	1
Step5	0	1	0	1
Step6	0	0	0	1
Total	21	40		

As shown in table8, step1 (Announcing present work descriptively/purposively) which is an obligatory step in Swales' (2004) model is the most favored step of move3 across both subsets, followed by step2 (presenting research questions or hypotheses). Therefore, these two steps are the strongest realization of move3. In addition, their high frequency illustrates how important for the Egyptian and international writers in the field of dentistry to present the aims of their research and to present questions/hypotheses. They are followed in the two datasets by steps3 (summarizing methods). It is noteworthy that Step4 (Announcing principal outcomes), step 5 (*Highlighting research contribution/significance*) appear only few times in the international sample while they did not occur in the Egyptian one at all. As for step6 (Outlining the structure of the paper), it does not appear neither in the international nor in the Egyptian corpus.

There is a great similarity between both sub-corpora in relation to the distribution of M3 steps. That is, there are no obligatory steps in the two subsets. In the two groups, Step3.1 is prototypical and steps2 and 3

are optional. Steps 4 and 5 are optional in the international sample, but they never appear in the Egyptian subset.

## 6. Discussion and Results

Based on the results of the move analysis reported above, there are similarities and variations between the structural organization of the Egyptian and international RAIs in the field of dentistry. Aligned with the findings of GEÇİKLİ (2013), Shirani and Chalak (2016), move1 was found to be the most frequent move throughout the two groups (DERAIs: 123, 71.1% vs. DIRAIs: 145, 62.8%), followed by M2 (LERAIs:27, 15.6% vs. LIRAIs: 47, 20.3%) and M3 (LERAIs: 23, 13.3% vs. LIRAIs: 39, 16.9%).

Unlike Samraj's (2002) findings; Afshar, Doosti and Movassagh's (2018), sub-step F(*generalizing*) was the strongest realization of move1 within both datasets (DERAIs: 28.5% vs. DIRAIs: 35.9%). In contrast with the findings of Stoller and Robinson (2013), step 1.A (indicating a gap) was not found in all the selected articles although it was the most used step in move2 across both sub-corpora (DERAIs: 55.6% vs. DIRAIs: 60.8%). Also, it was found that the frequency of occurrence of move2, step1.A in both corpora was more than step 1. B, which is similar to niche establishment in Management RAs reported by Lim (2012). Also, in relation to move2, step2, it was found that international authors used it more than their Egyptian counterparts and this finding differs from that of Samraj (2002).

In addition, it was observed that step1(announcing the present work descriptively/purposively) was the most preferred step within move3 across both sub-corpora (DERAIs: 76.2% vs. DIRAIs: 52.5%), a finding which is in accordance with the results of Stoller and Robinson



(2013). In contrast with Ozturk (2007) and Lim (2014), step2 (*presenting RQs or hypotheses*) is the second common step in its corresponding move in both sub-corpora. Agreeing with Stoller and Robinson (2013), Other Steps were found to be nonexistent in either dataset like step 6 (outlining the structure of the paper) and this non-existence may be attributed to the fact that dentistry, as one of the branches of hard sciences, deals with substances and materials. Although researchers in this discipline mention the objectives and procedures of their study in the introduction section, the involvement of their researches' structures seems unnecessary.

Another major difference between the two datasets is the classification of moves as obligatory, prototypical, or optional. Unlike Geçikli's (2013) findings, the three moves were classified as obligatory in international corpus whereas only move1 was found to be obligatory in the Egyptian corpus and move2 and 3 were prototypical. This result indicates that international writers are more likely to conform to Swales' (2004) model.

## 7. Conclusion

The current study analyzed and compared the generic structure of 50 dentistry RAIs published in Egyptian and international journals adapting an integrated approach combining Swales' (2004) model and Sheldon's (2011) eight sub-steps of move1. The comparison between the two groups showed that move1 which was the only obligatory move in the Egyptian corpus was found to be the most frequent move within both sub-corpora, followed by move2 and move3. However, the three moves of Swales' (2004) model were found to be obligatory in the international subset. This reflects the international writers' conforming to Swales'

(2004) model and their acquaintance with the conventions of writing RAIs. Also, it has been found that sub-step F (generalizing) is the strongest realization of move1 across both datasets while move2 was mainly realized through step1.A and step 1 of move3 is the most used step across both sub-corpora.

Examining the rhetorical structure of Egyptian and international RAIs in the field of dentistry suggest several pedagogical implications for novice researchers and instructors specializing in teaching writing to dentistry students. Due to the variations observed between the two groups, it is deemed necessary for the Egyptian researchers to improve their mastery of RA genre knowledge, rhetorical moves, steps and sub-steps to avoid the deficiencies in the Egyptian RAIs. In addition, the modified model of Swales' (2004) in combination with Sheldon's (2011) sub-steps of move1, step2 (make generalization of increasing specificity) is the major contribution of the present study. It may lead to a deeper understanding of the genre structure for more effective RAIs.

Limited by only one section and one field, further research on complete RAs across disciplines such as law and commerce is needed to enrich the researchers' knowledge of RAs writing conventions. It is recommended to investigate the linguistic features such as syntactic complexity and lexical bundles in different sections of RAs. As the present study is limited by the number of RAIs selected, further study may be carried out including a larger corpus.

### Works Cited

- Afshar, H.S., Doosti, M., & Movassagh, H. (2018). A genre analysis of the introduction section of applied linguistics and chemistry research articles. *Iranian Journal of Applied Linguistics*, 21 (1), 163-214.
- Alton-Lee, A. (1998). A troubleshooter's checklist for prospective authors derived from reviewers' critical feedback. *Teaching and Teacher Education*, 14(8),887-890.
- Armağan, A. (2014). How to write an introduction section of a scientific article? *Turkish Journal of Urology*, 39(1), 8–9.
- Bhatia, V. K. (1993). *Analyzing genre: language use in professional settings*. Longman.
- Bhatia, V. K. (1997). Introduction: Genre analysis and world English. *World English*, 16 (3), 313-319.
- Bhatia, V.K. (2012). Critical reflections on genre analysis. *Iberica*, (24), 17-28.
- Dudley-Evans, T., & John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge University Press.
- Fazel, I. (2019). Writing for publication as a native speaker: The experiences of two anglophone novice scholars: In P. Habibie & K. Hyland (Eds.), *Novice writers and scholarly publication: Authors, mentors, gatekeepers* (pp. 79-95). Palgrave Macmillan.
- Flowerdew, J. (2001). Attitudes of journal editors to non-native speaker contributions. *TESOL Quarterly*, 35 (1), 121-150.

- Flowerdew, J., & Wang, S. H. (2016). Author's editor revisions to manuscripts published in international journals. *Journal of Second Language Writing*, 32 (2), 39-52.
- GEÇİKLİ, M. (2013). A Genre-analysis study on the rhetorical organization of English and Turkish PhD theses in the field of English language teaching. *International Journal of Business, Humanities and Technology*, 3(6), 50-58.
- Henry, A. & Roseberry, R.L. (1999). Raising awareness of the generic structure and linguistic features of essay introductions. *Language Awareness*, 8 (3-4), 190-200.
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. Longman.
- Lim, J. M. (2012). How do writers establish research niches? A genre-based investigation into management researchers' rhetorical steps and linguistic mechanisms. *Journal of English for Academic Purposes*, 11, 229-245.
- Lim, J. M. (2014). Formulating research questions in experimental doctoral dissertations on ALs. *English for Specific Purposes*, 35, 66-88.
- Mustaine, E.E., & Tewksbury, R. (2016). A survey of social science journal editors for behind the scenes data on the publication process. *Journal of Scholarly Publishing*, 47 (3), 231-249.
- Ozturk, I. (2007). The textual organization of research article introductions in applied linguistics: Variability within a single discipline. *English for Specific Purposes*, 26 (1), 25- 38.

- Parodi, G. (2010a). Rhetorical organization of textbooks: A "colony-in-loops"? In G. Parodi (Ed.), *Academic and professional discourse genres in Spanish* (pp. 143-169). John Benjamins.
- Samraj, B. (2002). Introductions in research articles: Variations across disciplines. *English for Specific Purposes*, 21 (1), 1-17.
- Sheldon, E. (2011). Rhetorical differences in RA introductions written by English L1 and L2 and Castilian Spanish L1 writers. *Journal of English for Academic Purposes*, 10(4), 238-251.
- Shirani, Sh.& Chalak, A. (2016). A genre analysis study of Iranian EFL learners' master theses with a focus on the introduction section. *Theory and Practice in language studies*, 6 (10), 1982-1987.
- Stoller, F. L., & Robinson, M. S. (2013). Chemistry journal articles: An interdisciplinary approach to move analysis with pedagogical aims. *English for Specific Purposes*, 32(1), 45-57.
- Swales, J. (1981). *Aspects of Article Introductions*. The University of Aston, Language Studies Unit.
- Swales, J. (1990). *Genre Analysis: English in Academic and Research Settings*. Cambridge University Press.
- Swales, J. M. (2004). *Research genres: Explorations and applications*. Cambridge University Press.
- Swales, J. M., & Feak, B.C. (2000). *English in today's research world: A writing guide*. The University of Michigan Press.
- Swales, J.M., & Feak, C.B. (2004). *Academic writing for graduate students. Essential tasks and skills* (2<sup>nd</sup> ed.). University of Michigan Press.

Wannaruk, A., & Amnuai, W. (2015) A comparison of rhetorical move structure of applied linguistics research articles published in international and national Thai journals. *RELC Journal*, 47(2), 1-19.

## Appendix A

### List of Research Articles in the Egyptian Sub-corpus

Egy (2)

Abdelkawy, M. et al. (2019). Polymorphisms of IL-17A and IL-17F in Periodontal Disease: A Case-Control Study. *Perio J*, 3 (1), 29-37.

Egy (4)

Ahmed, S. et al. (2019). Evaluation of postoperative pain after using sonic vibringe irrigation system versus conventional syringe irrigation in single rooted teeth with symptomatic irreversible pulpitis: A randomized clinical controlled trial. *Advanced Dental Journal*, 1 (3), 86-94.

Egy (5)

El-Halafawey, R.A. et al. (2021). Prevalence of erupted supernumerary teeth and associated oral complications among a group of Egyptian children: a cross sectional study. *Egyptian dental journal*, 67, 1753-1759.

Egy (7)

Ashraf, R. & Aidaros, N. (2021). Evaluation the efficiency of nano seashell, sodium fluoride and commercially available toothpaste on dentinal tubules occlusion after acid attack using scanning electron microscope: in vitro study. *Egyptian dental journal*, 67, 2783-2794.

Egy (8)

Ibrahim, L.A., et al. (2021). Evaluation of the periapical healing following pulp revascularization using injectable prf vs nonsurgical root canal treatment in mature permanent teeth with periapical periodontitis. a clinical study. *Egyptian Dental Journal*, 67, 2663-2672.

Egy (9)

Mansour, A.S. (2020). Evaluation of candida albicans growth on bre-flex versus peek denture base in bilateral maxillary bounded partial denture: a randomized clinical trial. *Advanced Dental Journal*, 2 (4), 77-183.

Egy (10)

El-Hafez, A.A. (2021). Prevalence of dental caries among a group of Egyptian children using caries assessment spectrum and treatment index: A cross sectional study. *Advanced Dental Journal*, 3 (2), 63-72.

Egy (11)

Sawaf, H.H., et al. (2019). Tooth color uniformity following white spot lesion treatment with resin infiltration or bleaching: in vitro study. *Egyptian Orthodontic Journal*, 56, 51-60.

Egy (12)

Elkalza, A.R., & Rateb, A.S. (2018). Comparative study of root resorption between two methods for accelerated orthodontic tooth movement. *Egyptian Orthodontic Journal*, 53, 23-30.

Egy (16)

Metwally, M.M. (2020). Assessment of oral health related quality of life for children with special health care needs after oral rehabilitation under general anaesthesia (cross sectional study). *Alexandria Dental Journal*, 45 (3), 12-17.

Egy (21)

Eid, M.E., et al. (2020). Immediate implant placement combined with sticky bone and enriched fibrin membrane for teeth exhibiting periapical pathosis. *Al- Azhar Assiut Dental Journal*, 3 (2), 105:112.

## **Appendix B**

### **List of Research Articles in the international Sub-corpus**

(Int 1)

Salgarello, S., et al. (2021). The new normalcy in dentistry after the covid-19 pandemic: An italian cross-sectional survey. *Dentistry Journal*, 9 (86), 1-14.

(Int 3)

Mistry, A., et al. (2021). 3D Guided dental implant placement: Impact on surgical accuracy and collateral damage to the inferior alveolar nerve. *Dentistry Journal*, 9 (99), 1-11.



(Int 4)

Anitua, E., et al. (2021). Influence of Dental Implant Diameter and Bone Quality on the Biomechanics of Single-Crown Restoration. A Finite Element Analysis. *Dentistry Journal*, 9 (103), 1-11.

(Int 9)

Kobbe, C. (2019). Evaluation of the value of re-wetting prior to resin infiltration of postorthodontic caries lesions. *Journal of Dentistry*, 91, 1-7.

(Int 11)

Yang, C, Y., et al. (2017). RANKL deletion in periodontal ligament and bone lining cells blocks orthodontic tooth movement. *International Journal of Oral Science*, 10 (3), 1-8.

(Int 13)

Yost, S., et al. (2018). Increased virulence of the oral microbiome in oral squamous cell carcinoma revealed by metatranscriptome analyses. *International Journal of Oral Science*, 10 (32), 1-10.

(Int 14)

Banihani, A. (2018). The impact of dental caries and its treatment by conventional or biological approaches on the oral health-related quality of life of children and carers. *International Journal of Paediatric Dentistry*, 28, 266–276.

(Int 16)

Pelekos, G., et al. (2019). A double- blind, paralleled- arm, placebo- controlled and randomized clinical trial of the effectiveness of probiotics as an adjunct in periodontal care. *Journal of Clinical Periodontology*, 46, 1217–1227.

(Int 24)

Kim, J. H., et al. (2019). Characterization of an anti-foaming and fast-setting gypsum for dental stone. *Dental Materials*, 35, 1728–1739.

### ملخص

يهدف البحث الحالي إلى دراسة البنية النوعية لأقسام المقدمة في مقالات بحثية كتبها باحثون مصريون ودوليون في مجال طب الأسنان. وتحقيقاً لهذه الغاية، تم اختيار عينة من ٥٠ مقدمة لمقالات بحثية تم اختيارها من مجلات مصرية ودولية بين عامي ٢٠١٤ و ٢٠٢١. وقد تبنت الدراسة نموذج "انشاء مساحة بحثية" لسويلز (٢٠٠٤) بالاشتراك مع الثماني خطوات الفرعية للحركة الأولى لشيلدون (٢٠١١). وقد تم استخدام كل من الطريقة النوعية والكمية لتحليل البيانات المختارة. أظهرت النتائج أوجه تشابه واختلاف بين المجموعتين حيث وجد أن الحركة الأولى هي الأكثر شيوعاً داخل مجموعتي البيانات. ومع ذلك، كانت هذه الحركة هي الوحيدة الإلزامية في المجموعة المصرية، في حين تم تصنيف الحركات الثلاث على أنها إلزامية في المجموعة الدولية. يساهم هذا البحث في علم أصول التدريس في مساعدة الباحثين المصريين والمبتدئين على كتابة أقسام مقدمة أكثر فعالية. كما أنه يساهم في فهم أفضل للبنية النوعية لقسم المقدمة من خلال استخدام نهج متكامل لكل من سويلز (٢٠٠٤) وشيلدون (٢٠١١) بالإضافة إلى ذلك، فإن استخدام عينة كبيرة يجعل نتائج الدراسة أكثر موثوقية.