Citation Quality Analysis in Iranian and International High-rank Journals

Maryam Barghamadi*
Flinders University, Australia
Masood Siyyari
Science and Research Branch of Islamic Azad University (SRBIAU), Iran

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Abstract
In the academic context, a citation is a fundamental aspect of academic writing that helps authors to providing strong argumentation, evaluate and express their attitude towards previous studies. This study aims to investigate the types and functions of citation in the research articles. To this end, a corpus of 60 research articles from 3 high-rank Nursing and Midwifery and Applied Linguistics journals that were written by Iranian scholars (in local journals) and international writers were selected, and their citation patterns were analysed based on Thompson and Tribble’s frameworks (2001). Then, the Chi-square and Fisher’s exact tests were run to investigate the similarities and differences in the citation patterns in the selected journals from a statistical point of view. Although the corpus-based analysis revealed that the Iranian journal articles had a higher density of citations than international journal articles, the international scholars utilised all citation patterns. The results of this study could be used effectively by EAP teachers, students, and novice scholars to improve the understanding of theoretical and practical dimensions of citation patterns in the fields of medical and humanities sciences.

Keywords: Academic Writing, Citation Analysis, Corpus-based

Introduction
English as an academic lingua franca or a ‘language of scientific communication’ (Lorés-Sanz, 2016) has become the first language in academic contexts and research articles (RAs). The majority of scholars are non-native so, English is used as an Additional Language (EAL) for publications (Cargill & Burgess, 2017), and being familiar with academic structure could be a fundamental part of this communication. Scholars in any field should be aware of the type and style of language widely used in their community as the primary criterion for accepting or rejecting research papers.

One aspect of academic discourse is the use of citations to helps authors to provide strong argumentation that is “a key social practice in academia” (Friedman, 2019, p.23). References to previous research enable authors to develop their authority by demonstrating that they are qualified members of the community, to visualise their research within a disciplinary context (Luzon, 2018, p.174), “establish a niche for themselves within their special discourse community” (Jalilifar & Dabbi, 2012, p.91), indicate allegiance to a specific group, and the creation of a reliable writing ethos (Hyland, 1999, p.342). Therefore, it is assumed that citation plays a vital role in knowledge construction, and effective citation requires specialised academic writing skills; that is, novice writers would require to learn how to use various citation forms and functions to write persuasively.

Swales (1986, 1990) initially categorised the citation types into integral and non-integral. Integral citations accompany the name of the cited writer is syntactically part of the sentence and plays a grammatical role. In the non-integral citation, the author's name appears outside the sentence structure, separated from the text, and placed within brackets. Table 1 summarises the previous studies (e.g., Pickard, 1995; Hyland, 1999, 2002; Yeh, 2009; Shi, 2010; Luzon, 2018; Duke, 2020) conducted on the citation types in texts by a particular group of writers.
Table 1
Summary of the Previous Studies on the Citation Types

<table>
<thead>
<tr>
<th>Author</th>
<th>Subjects</th>
<th>Measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickard (1995)</td>
<td>Citation preferences of expert writers</td>
<td>Citation preferences Grammatical forms</td>
<td>Integral citation is preferred.</td>
</tr>
<tr>
<td>Hyland (1999)</td>
<td>Citation preferences of writers in different disciplines</td>
<td>Integral and non-integral citation</td>
<td>Non-integral citation is more used in hard disciplines.</td>
</tr>
<tr>
<td>Hyland (2002)</td>
<td>Citation preferences of writers in 8 different disciplines</td>
<td>Integral and non-integral citation</td>
<td>Integral citation is more used in soft disciplines.</td>
</tr>
<tr>
<td>Yeh (2009)</td>
<td>Citation preferences of TESOL Taiwanese students</td>
<td>Integral and non-integral citation</td>
<td>Integral citation is more common amongst these non-native students.</td>
</tr>
<tr>
<td>Shi (2010)</td>
<td>Citation preferences of students</td>
<td>Integral and non-integral citation</td>
<td>Students use direct quoting when they are unable to understand or paraphrase the previous studies.</td>
</tr>
<tr>
<td>Luzon (2018)</td>
<td>The use of reporting verbs in RAs by Spanish and Anglophone writers</td>
<td>Investigated citation form by considering on reporting verbs</td>
<td>Spanish scholars utilised a higher percentage of discourse act RVs</td>
</tr>
<tr>
<td>Duke (2020)</td>
<td>Citation practice in the South African ER and ALS journals</td>
<td>Citation language form patterns</td>
<td>The high rate of non-integral citations in both context.</td>
</tr>
</tbody>
</table>

It seems likely that authors in different fields of study have varieties of preferences and follow different rhetorical conventions. This assumption was tested by Hyland (1999, 2002). He investigated 80 papers from both hard and soft disciplines, and he found that non-integral citations were more used in hard disciplines to highlight the study and place less emphasis on the researchers. On the other hand, integral citations were used by authors in soft disciplines to show their position and make evaluations. In a recent study, Duke (2020) investigated 34 RAs in Educational Research (ER) and Applied Linguistics and Language Studies (ALS) as soft sciences disciplines in the South African journals. The researcher notes that the high rate of non-integral citations in both contexts could demonstrate a shift “towards increasingly scientific and quantitative orientations” in both disciplines (Duke, 2020, p.51). Therefore, it could be challenging to reach a common conclusion that authors in different fields follow their colleagues to use the same patterns and types of citation.

Considering contextual functions of citations and to complete the work of Swales (1986,1990), Thompson and Tribble (2001, p.95-96) divided non-integral citations into four categories (Source, Identification, Reference, Origin) and integral citations into three categories (Verb Controlling, Naming, Non-citation) (see Method section).

Table 2
Summary of the Previous Studies on the Functions of Citation

<table>
<thead>
<tr>
<th>Author</th>
<th>Subjects</th>
<th>Measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thompson &amp; Tribble (2001)</td>
<td>Comparing sub-types of integral and non-integral citations</td>
<td>Citations in agricultural botany and agricultural economics</td>
<td>Unlike agricultural economists, agricultural botanists mainly used source and identification.</td>
</tr>
<tr>
<td>Harwood (2009)</td>
<td>Interdisciplinary variations in citations</td>
<td>Citation functions used by computer scientists and sociologists</td>
<td>There are interdisciplinary variations in the usage of citations</td>
</tr>
<tr>
<td>Mansourizadeh &amp; Ahmad (2011)</td>
<td>Comparing citations by non-native experts and novice writers from the same discipline</td>
<td>Six different citation functions used in chemical engineering papers</td>
<td>Expert writers made greater use of non-integral citations to support and justify their claims.</td>
</tr>
<tr>
<td>Dontcheva-Navratilova (2015)</td>
<td>The function of citations in Research Articles</td>
<td>RAs in English by Anglophone scholars and by Czech linguists</td>
<td>Non-Anglophone scholars background influences their citation practices</td>
</tr>
</tbody>
</table>

The previous studies into citation by different writers, such as expert vs. novice writers and native vs. non-native, investigated the rhetorical functions of citations. (e.g. Thomson & Tribble, 2001; Petric, 2007; Harwood, 2009).
2009; Mansourzadeh & Ahmad, 2011; Dontcheva-Navratilova, 2015). These studies are summarised in Table 2. For instance, Thompson and Tribble investigated the type and functions of citations in agricultural botany and agricultural economics. The researchers found that agricultural botanists used more non-integral citations, mainly source and identification functions, while agricultural economists preferred integral-naming citations. The results of Harwood’s (2009) interview-based study of citation functions revealed that there were interdisciplinary variations in citation usage by computer scientists and sociologists. Mansourzadeh and Ahmad (2011) analysed the types and functions of citations in fourteen research papers written by non-native experts and novice writers from chemical engineering in Malaysia. According to their results, novice writers used citations in isolation. On the other hand, expert authors relied more heavily on non-integral citations to strategically support and validate their arguments. Two potential explanations for these variations could depend on the disciplines and expertise knowledge of authors.

Furthermore, investigation on citation patterns has indicated differences between cross-disciplinary and cross-linguistic variations of citation features (e.g. Okamura, 2008; Mur-Duenas, 2009; Rowley & Carter-Thomas, 2014; Hu & Wang, 2014). Table 3 shows a summary of the previous studies.

Table 3
Summary of the Previous Studies on Cross-disciplinary and Cross-linguistics of Citation

<table>
<thead>
<tr>
<th>Author</th>
<th>Subjects</th>
<th>Measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Okamura (2008)</td>
<td>Cross-disciplinary on Citation</td>
<td>RAs in biology, chemistry, and physics written in English by Japanese</td>
<td>Anglophone scholars used more variety of citation forms</td>
</tr>
<tr>
<td></td>
<td>forms</td>
<td>and Anglophone scholars</td>
<td></td>
</tr>
<tr>
<td>Mur-Duenas (2009)</td>
<td>Cross-linguistics study on the</td>
<td>Business management RAs written in English and Spanish.</td>
<td>Differences in type and the functions of citations</td>
</tr>
<tr>
<td></td>
<td>citation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rowley &amp; Carter-Thomas</td>
<td>Cross-disciplinary, Cross</td>
<td>Uncorrected paper written in English by expert French and Anglophone</td>
<td>Anglophone writers used a higher number of “reporting-that” clauses.</td>
</tr>
<tr>
<td>(2014)</td>
<td>linguistics</td>
<td>scholars, and articles written in French.</td>
<td></td>
</tr>
<tr>
<td>Hu &amp; Wang (2014)</td>
<td>Cross-disciplinary, Cross</td>
<td>Chinese and English-medium journals of applied linguistics and medicine.</td>
<td>Differences in the type of citation-based on dialogic engagement</td>
</tr>
<tr>
<td></td>
<td>linguistics study of citation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>patterns in RAs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

More specifically, Okamura (2008) analysed 30 RAs in biology, chemistry, and physics written in English by Anglophone and Japanese scholars, and the results indicated that Japanese writers used integral citation forms. In contrast, there was a range of ways to choose citation forms in the Anglophone context. When looking at the results of previous research on the pattern of citation between L1 and L2 scholars (e.g., Okamura, 2008; Rowley-Jolivet & Carter, 2014; Dontcheva-Navratilova, 2016; Luzon, 2018), they could demonstrate that these differences could be rooted in the writers’ first language. Thus, their L1 background of scholars influences their citations.

If there are contrasts in the referencing process between high and low-rank articles, the citation strategies in high-quality papers may suggest an effective strategy in using citations. Petric (2007) states that citation patterns used by scholars should be the model for student writing. Therefore, a better understanding of the citation forms used in high-rank journals could enable program designers and lecturers to develop effective English language courses for improving the writing skills of higher education students. This research intends to achieve through conducting citation analysis on high-quality Iranian (IR) and International (HI) journals in Applied Linguistics (AL) and Nursing and Midwifery (NM) article written in English.

Methodology

Corpus
This cross-disciplinary research emphasised humanities and medical sciences as “soft and hard discipline” (Hyland, 1999; Moed, 2005). Since humanities and medical sciences consist of many disciplines, Applied Linguistics from humanities and Nursing and Midwifery from medical journals were selected. To this end, 60 articles from high-quality journals by Iranian (IR) as EAL scholars and high-rank international journals (HI) with different linguacultural backgrounds that written in English in the field of Applied Linguistics (AL) and Nursing and Midwifery (NM) between 2015 and 2019 were analysed. The SCImago journal rank, known as a global reference list for scientific journals, and obtained via the SJR (Scimago Journal & Country Rank) website, was chosen to select high-rank international journals. By this journal rank list, the top-rank journals of each field were selected based on their five-year impact factor. Then, the author downloaded the target articles based on the access and permission given by the journal websites to Iranian universities. Table 4 illustrates the name and the ranking of the selected international journals base on SJR 2018.
The bibliometric analysis of the NM journals showed a tendency to publish first in the *Journal of Advanced Nursing* and then in the *International Journal of Nursing* (Gimanez-Espert & Prado-Gasco, 2019). As for the AL journals, this goes on the *Journal of Second Language Writing*, which has had a steady growth in its number of articles and its impact factor over the recent years (Arik, 2017). All the three selected journals of language and linguistic were among the top ten journals of this field (Egbert, 2007).

### Table 4
**Selected International Journals**

<table>
<thead>
<tr>
<th>Applied Linguistics (AL)</th>
<th>Nursing and Midwifery (NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF 3.32</td>
<td>IF 5.022</td>
</tr>
<tr>
<td>H 60</td>
<td>H 91</td>
</tr>
<tr>
<td>SJR 3.07</td>
<td>SJR 1.56</td>
</tr>
<tr>
<td><em>Applied linguistics</em> (Oxford)</td>
<td><em>Journal of Advanced Nursing</em> (Wiley Online Library)</td>
</tr>
<tr>
<td>IF 4.5</td>
<td>IF 2.37</td>
</tr>
<tr>
<td>H 76</td>
<td>H 131</td>
</tr>
<tr>
<td>SJR 2.99</td>
<td>SJR 1.01</td>
</tr>
<tr>
<td><em>Journal of Memory and Language</em> (Elsevier)</td>
<td><em>Midwifery</em> (Elsevier)</td>
</tr>
<tr>
<td>IF 5.14</td>
<td>IF 2.43</td>
</tr>
<tr>
<td>H 125</td>
<td>H 58</td>
</tr>
<tr>
<td>SJR 1.89</td>
<td>SJR 1</td>
</tr>
</tbody>
</table>

The Iranian journals for these two categories were selected randomly from the Q1 tier based on the Islamic World Science Citation (ISC) journals rank. Table 5 presents the list of the selected Iranian journals.

### Table 5
**Selected Iranian Journals**

<table>
<thead>
<tr>
<th>Applied Linguistics (AL)</th>
<th>Nursing and Midwifery (NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Apply Research on the English Language</em></td>
<td><em>Iranian Journal of Nursing and Midwifery</em></td>
</tr>
<tr>
<td><em>Iranian Journal of Applied Linguistics</em></td>
<td><em>Nursing practice Today</em></td>
</tr>
<tr>
<td><em>The Journal of Teaching Language Skills</em></td>
<td><em>International Journal of Community Based Nursing and Midwifery</em></td>
</tr>
</tbody>
</table>

A small corpus between 100,000 and 500,000 words may be effective for studying specific research questions (Kennedy, 1998; Ghadessy, Henry & Roseberry, 2001; Flowerdew, 2013). Flowerdew (2013) states two advantages for small size corpora. The first benefit is that small corpora are relatively easy to create. In addition to this, small corpora can be processed with readily available software packages such as AntConc and Wordsmith Tools or alternatively with web-based tools. Having said that, one danger, if a corpus is too small, is that of not having enough examples (Sinclair, 2001, cited in Flowerdew, 2013). In this research, a small size corpus was created using the selected international and Iranian journals. As mentioned by previous studies (e.g., Thompson, 2005; Bahadorfar & Gholami, 2017), a few citations have been found in the Method section. Thus, this section of articles and statistic section of results were ignored in this research. To create the final corpus, front matter and back matter (Fløttum, Dahl & Kinn, 2006; Hyland, 1999) of selected articles were deleted to obtain a corpus of approximately 178,500 words.

In this study, the framework proposed by Thompson and Tribble (2001) was used for analysing the types and the functions of citations employed in the corpus (see Thompson & Tribble for more details). This framework has been extensively utilised for analysing the citation types and functions employed in various text types in different disciplines (Farnia, Bagheri & Saeedi, 2018; Kafes, 2017; Bahadorfar & Gholami, 2017; Nguyen & Pramoosolook, 2016; Kamyabi, Ghonsooly & Mahdavi, 2014; Karimi & Asadnia, 2014; Jalilifar & Dabbi, 2012). Also, this framework was modified and combined to study the citation functions used in M.A. theses in Gender studies by Petrić (2007) and for analysing RAs in Chemical Engineering by Mansourizadeh and Ahmad (2011).

The definition of the framework was elicited from Thompson and Tribble (2001, p.95-96) and examples provided from the corpus. Based on the framework, the first type of integral citation is *Verb Controlling* that a verb occurs in the cited sentence. In both active and passive forms, the citation function is an agent to control the verb (Example1). *Naming* was defined as a noun phrase or a portion of a noun phrase that manages the citation (Example 2). ‘According to’ is a common phrase in this type of citation. *Non-Citation* refers to the author’s name without reference year because the year has been provided earlier in the text (Example 3).

The first type of non-integral citation is the *Source*, which shows where the concept or knowledge came from. The knowledge is found in a proposition rather than a single noun phrase in this case (Example 4). *Identification* can identify the agent in the sentence that refers to (Example 5). *Reference* serves as a cue to look up more details in other studies. The terms “see” and “cf” are identifiers in the text for this form of non-integral...
citation practice (Example 6). *Origin* is connected to citing the initiator of a method, theory, and approach (Example 7).

1. Canale and Swain (1980) consider circumlocution as an element of strategic competence, which together with grammatical competence, sociolinguistic competence, and discourse competence (ALIR).

2. Data were analysed according to Salazar’s (2006) categorisation of circumlocution, namely description, function, superordination, location, and combination. (ALIR)

3. Driscoll and Carliner stated that there are four main interpretations associated with blended learning.... (NMHI)

4. Emerging evidence demonstrates nurse-led chronic disease management to be feasible and highly acceptable to consumers (Halcomb et al., 2015, Halcomb et al., 2015, Mahomed et al., 2012, Stephen et al., 2018, Stephen et al., 2018). (NMHI)

5. Some studies showed that physical symptoms are the possible reason for the psychological disorder (8, 9). (NMIR)

6. In SFL testing and assessment, diagnostic assessment is usually characterised as focusing on evaluating learners' strengths and weaknesses (see Davies et al.1999; Alderson 2005). (ALHI)

7. These statistical models, recently developed by psychometricians (Leighton and Gierl 2007; Hueber 2010), would certainly appear to have useful applications in the analysis of data derived from diagnostic tests. (ALHI)

**Procedure**

All selected articles were converted from PDF format to DOC format using free online software (https://www.pdfonline.com/pdf-to-word-converter). After removing the extra parts, word counts were obtained for each article using MS Word. Using the Plain Text online tool, all the texts were converted from DOC to TXT. Afterwards, these text files were loaded into AntConc for searching and analysing the citations. To this end, Regular Expression (Regex) in AntConc concordance software was employed to find the place of citations within the texts.

The citation forms and functions were categorised using Thompson and Tribble’s framework and a thorough examination of the context of each citation shown in the concordance lines. The following procedure was used to count the number of valid citations:

- It was recorded as one citation if a cited statement was referred to a single source (see example 8) (Hyland, 2000).
- It was counted as a single citation when two or more different sources were cited for one statement (as in example 9) (Mansourizadeh & Ahmad, 2011).
- Multiple citations were counted when a single sentence included multiple sources cited for various statements, as seen in example 10 (Hu & Wang, 2014).

The following examples from the corpus show the method used to count citations:

8. According to Hyland (2005a), these non-propositional features of texts are equally as essential as the propositional content in constructing a cohesive, coherent, and compelling argument. (ALHI)

9. ....... heel stick still constitutes the method of choice in most neonatal units and represents the most common painful event among all procedures performed on newborns (Carbajal et al., 2008; Cruz et al., 2016). (NMHI)

10. The dominant account in the literature for RC attachment preferences has been based upon Recency (Gibson, Pearlmutter, Canseco-Gonzalez, & Hickok, 1996), Late Closure principle (Frazier & Fodor, 1978), or Right Association (Kimball,1973), which assume that all human languages are processed in the same way. (ALIR)
In this study, the focus was put only on the references to the work of other writers, and the discussion of self-citation was excluded. The chi-square test was run to measure the correlation between two nominal variables nationality (Iranian and International articles) and discipline (AL, NM). The chi-square is a non-parametric test, and therefore, it has fewer assumptions than parametric tests (Larson-Hall, 2010); however, some basic assumptions must be met to make the results valid. These assumptions include:

1. Independence of observations
2. Nominal data
3. The expected frequencies should be greater than 5.

One easy way to break down a significant chi-square test is to use data that we already have to check the standardised residual (Field, 2009). To do so, first, the chi-square was run. If the chi-square result is significant, then the crosstab is checked to see how the significant chi-square shows itself in the frequencies of cells. If the chi-square is not significant, standard residuals are also checked to see whether any of the cells have any extreme frequency (i.e. very low or very high frequency compared to neighbouring cells).

In this research, in some parts, the frequencies were lower than 5. One solution for coping with the issue is to run Fisher’s exact test instead of the chi-square test (Howell, 2002, p.129). Absolute frequency would have been a useful measure if the length of articles had been the same in terms of their word counts. However, when this condition does not exist, it is recommended to normalise the data by converting the raw frequencies to 10000 words. Thus, the normalised frequencies were calculated in the quantitative analysis in this study. Besides, the proportions were utilised to develop comparative graphs in this study.

**Results**

The study aimed to investigate the citation type and functions in the selected articles. Table 6 presents the total and the normalised (per 10000 words) number of citations in the corpus. However, the density of total citations in the international journals was less than the Iranian journals as shown in the table; the result of the chi-square shown that there was not any statistically significant difference between them in this regard ($\chi^2(1) = .90, p > .05$).

**Table 6**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Total Frequency</th>
<th>Per 10000 Words</th>
<th>Words in the Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALIR</td>
<td>847</td>
<td>147</td>
<td>57,500</td>
</tr>
<tr>
<td>ALHI</td>
<td>804</td>
<td>122.6</td>
<td>65,586</td>
</tr>
<tr>
<td>NMIR</td>
<td>385</td>
<td>182.5</td>
<td>21,099</td>
</tr>
<tr>
<td>NMHI</td>
<td>534</td>
<td>155.9</td>
<td>34,246</td>
</tr>
</tbody>
</table>

In order to have a manageable analysis of this corpus, the introduction and literature as one section and discussion and conclusion as another were analysed because in some articles, these parts were combined.

**Citation in Introduction and Literature Review Sections**

To analyse the citation types and functions, Thompson and Tribble’s framework was utilised in this study. Based on this classification, integral citation practice includes three subcategories: verb controlling, naming, and non-citation strategy, and non-integral citation consist of four subcategories: Source, Identification, Reference, Origin. Figure 1 shows the proportions of citations in high-rank Iranian (IR) and international (HI) journals for Applied linguistics and Nursing and Midwifery. Chi-square results and frequency (per 10,000 words) for citation in these sections were summarised in Table 7.

**Figure 1**

*The Proportion of Citation Types in Introduction and Literature Review Sections*

![Figure 1](image_url)
As shown in Table 7, this difference was statistically significant ($x^2(1)=10.28$, $p < .05$) in using integral citation in the corpus. The normalise frequency shows that the authors in ALIR articles utilised more integral citation (n=108.9, 56.1%) compared to high-rank international articles (n=46.8, 29.8%) in their introduction and literature sections. In contrast, the Iranian scholars in NM articles (n=16, 6.4%) used less integral citations than international articles of this field (n=22.4, 9.9%). The NMIR articles (n=16, 6.4 %) used fewer integral citations than high-rank international articles of this field (n=22.4, 9.9%). One reason to accept that NMIR utilise more non-integral citations could back to use more Vancouver style in Iranian medical journal (Ghodarzi & Gholami, 2017). Therefore, the Iranian writers are familiar with this type of citation.

Regarding to subcategory of integral citation, Iranian AL articles used more verb controlling type (n=72.9, 37.6%) in comparison with high-rank international articles (n=32.1, 20.5%). Based on the literature, this is mainly due to its ‘popularity’ (Swales, 2014) and its ‘simplicity’ (Jalilifar, 2012).

Naming was defined as a noun phrase or a part of a noun phrase that controls the citation. As shown in Table 7, the difference was statistically significant in this type of citation ($p=.035$, Fisher’s exact test). ALIR articles (n=23.8, 12.3%) used twice as more naming citation as the international articles (n=11.6, 7.4%). In contrast, the NMIR articles (n=3.4, 1.4%) utilised less naming citations compared to the international articles (n=7.5, 3.3%).

Non-Citation is used to refer to another writer but the name is given without a year reference because the reference has been provided earlier in the text and therefore, the writer avoids repeating it. Evaluation of the Iranian NM journals revealed that non-citation was not used in these journals.

Non-integral citation, the author’s name appears outside the sentence structure, separated from the text and placed within brackets and consists of Source, Identification, References, and Origin. As shown in Table 7, the results of the chi-square conducted on non-integral citation indicated that there was a significant difference ($x^2(1)=5.58$, $p<.05$). The articles published in the high-rank international AL journals have used a much higher number of non-integral citations (i.e., n = 110.3, 70.2%) in comparison with the Iranian ones (i.e., n =85, 43.9%), however, the international and Iranian NM journals have made use of an almost equal number of non-integral citations (i.e., NMHI: n = 203, 90.1%; NMIR: n = 235.5, 93.6%) in their introduction and literature sections.

The first type of non-integral citation is the Source, which shows where the concept or knowledge came from. Although this kind of citation was the most common rhetorical function of citations in the corpus, significant differences were found ($x^2(1)=15.8$, $p<.05$) in this regard. In the papers published in the international journals of AL, more source citations were used (n=56.3, 35.8%) compared to the Iranian articles of this discipline (n=34.8, 18%). In contrast, the number of this type of citation in Iranian NM articles (n=181.8,72.3%) is higher than the high-rank international ones (n= 110.5,49%). Using source or attribution is one way to demonstrate the writer’s knowledge, acknowledgement, and appreciation of previous studies (Kafes, 2017) and confirm their idea.

Identification identifies an agent and act within the sentence to which it refers. Table 7 illustrates a statically significant difference in the use of identification in the corpus ($x^2(1)=6.54$, $p<.05$). This kind of citation was used more in ALIR journals (n=29.6, 15.3%) than international ones (n= 13.6, 8.6%). The usage
of identification in NM journals was not equal but the differences were less compared to AL journals (NMIR: n=46.9, 18.6%; NMHI, n=56.7, 25.2%).

Reference acts as a signal to refer to further information in other studies. The words “see” and “cf” are actual signs to identify this kind of non-integral citation practice in the text. Although the high-rank international journals in both discipline categories used more reference citations (AL: n=24.9; NM: n=6) compared to Iranian NM (n=0) and AL (n=7.5) journals, there was not any statistically significant difference in Fisher’s exact test (p=.313), as shown in Table 7. Through reference, the authors recommended other sources or found more details to their readers.

Origin is associated with citing the originator of a method, theory, and approach. The result of the statistical analysis (Table 7) shows that there was a significant difference in the use of origin in the corpus ($\chi^2(1) = 5.16, p < .05$). The origin citation was used more frequently in the international journals in AL (n=15.5, 9.9%) and NM (n=29.9, 13.2%) in comparison with the Iranian AL (n=13, 6.7%) and NM (n=6.9, 2.7%) journals.

Citation in Discussion and Conclusion Sections
In most journals, discussion and conclusion sections are merged into one section. In this study, therefore, both of these sections are considered as one section. Figure 2 demonstrates the proportions of different citation types and functions in the discussion and conclusion sections of the corpus. Chi-square results and frequency (per 10000 words) for citation in these sections were summarised in Table 8.

According to Figure 2 and Table 8, the articles published in Iranian journals (AL: n=57.1, 60.7%; NM: n=44.5, 33.3%) utilised more integral citations in their discussion and conclusion sections compared to the high-rank international journals (AL: n=27.5, 34.2%; NM: n=25.4, 22.8%). The chi-square test result showed no statistically significant difference in terms of the integral citation in the discussion and conclusion sections of the corpus. Moreover, the Iranian journal articles employed verb controlling and naming more frequently, although the difference between the Iranian and the high-rank international journals was not significant (p > .05).
For non-citation, Fisher’s exact test was checked. It should be reminded here that non-citation was not used in the Iranian Nursing and Midwifery articles. This research found that citation patterns were significantly different in the introduction and literature sections. This finding could confirm that introduction and literature are the central sections for finding citations.

Discussion
Reference or citation is considered as a strategy by which scholars refer to other examinations and discoveries. The fitting utilisation of reference is an integral asset at the writer’s transfer to influence the readers. On the other hand, lack of information about the citation method can lead to failure to convey sufficient motivation. Moreover, comprehension of reference is a fundamental aptitude in the academic text since it empowers writers to build up and keep up a decent correspondence with readers through unique writings. This study investigated whether there were any significant differences between using citation patterns in the research articles published in the high-rank international journals and the Iranian journals of AL and NM articles. In order to answer these questions, the chi-square test was run to determine the differences in citation patterns. The results of the citation pattern analysis revealed that there are statistically significant differences in some types and functions of citation in the corpus as well as in different sections of the articles. However, there is no significant difference in the total citation patterns in this corpus, which could mean that the density of citations was similar to each other. This finding is in line with Hu and Wang (2014), in a cross-disciplinary, cross-linguistics study of citation patterns in Chinese and English journals in medicine and applied linguistics. However, this result contrasts with some of the previous studies (Hyland, 1999, 2000; Thompson & Tribble, 2001) that reported more citations in soft discipline than in hard ones. In this corpus, more citations were used in the Iranian articles in AL and NM journals than those published in the high-rank international journals of these fields. This finding was confirmed with previous works (e.g. Farnia et al., 2018; Oskuie & Kuhi, 2014) that Iranian writers used more citation practice than international research articles.

The finding of this research indicated that both types of integral and non-integral citations were used across the four corpora. The results indicated that a significant difference was observed in using integral citation in the AL articles in the introduction, and Iranians employed more integral patterns compared to the high-rank international journal articles. The result is in line with the researchers who found the differences in citation patterns in native and non-native expert and novice writers, indicating that novice and non-native writers used more integral citation (Marti, Yilmaz & Bayyurt, 2019; Kafes, 2017; Hu & Wang, 2014; Mansourizadeh & Ahmad, 2011; Mur Duenas, 2009; Adel & Garreston, 2006). This parallels previous findings that the integral citation practice in the Iranian journals was more than the international journals (Farnia et al., 2018; Shooshtari, Jalilifar, & Shahri, 2017; Kamyabi, Ghonsooly & Mahdavi, 2014; Shooshtari & Jalilifar, 2010). However, Monreal and Salmon (2011) investigated citation patterns in the literature review chapters in PhD theses written in Spanish and English. They found that a high ratio of integral citations in English corpus in comparison with Spanish writers.

Regarding the traditional view, AL is referred to the soft and NM to the hard discipline. Hyland (1999, 2002) found that hard disciplines used more non-integral citations and soft disciplines used more integral citations. In contrast, the results of Duke’s study revealed that there was a high ratio of non-integral citations in Educational Research (ER) and Applied Linguistics and Language Studies (ALS) as soft sciences disciplines. By reviewing Hyland and Jiang’s study (2017), the non-integral citations without considering particular disciplines have been increased. It seems that information reports are the goal of citation in the international context instead of emphasising the cited authors. Scholars using more non-integral citation emphasise the propositional content (Hyland, 1999; Swales, 1990; Thompson, 2005). Weissberg and Buker (1990) describe integral and non-integral citations as ‘author prominent’ and ‘information prominent’. This view could indicate that Iranian writers in the AL articles show the authors’ tendency instead of information.

The citations function, verb controlling and source, were the most frequent functions in integral and non-integral citations. Verb controlling was used more frequently in Iranian AL articles in the target corpus. Such findings are similar to Farnia et al., who analysed 168 introduction sections of applied linguistics in international and Iranian journals. The findings of this research are also consistent with the previous studies on the citation indicating verb controlling was the most frequent type in non-native and novice writers (Kafes, 2017; Nguyen, 2014; Jalilifar & Dabbi, 2012). Also, more verb controlling was found in discussion sections of the Iranian journal articles. This view supports earlier findings in which non-native writers displayed a tendency to overuse verb-controlling citations (Mansourizadeh & Ahmad, 2011), due to popularity (Swales, 2014) and simplicity (Jalilifar, 2012). To this extent, Petric (2007) claims that attribution (source) is the most frequent citation type in student academic writing because of its simplicity.

This study also showed that more reference and origin citations were used in the introduction and conclusion sections of the international articles in both disciplines. Kafes’s (2017) study, in a similar vein, revealed that expert writers used more references and origin. In other words, novice writers employ a limited range of citation types and functions (Thompson & Tribble, 2001). To sum up, the results of current research
showed that the international journal articles utilised all types and functions of citation. Also, this study revealed that the patterns of citation between NM journals with different contexts (Iranian and international journals) were more similar to AL and NM in the same context. In a similar vein, Fløttum, Dahl, and Kinn (2006) found more similarities between a French and Norwegian medical research article than French linguistics and French medical articles and concluded that discipline is more important than language. Moreover, in this research, it was found that citation patterns were significantly different in the introduction and literature sections. This finding could confirm that introduction and literature are the central sections for finding citations.

**Conclusion**

English as an academic lingua franca (EFL) has become the first language in academic contexts and research articles. Citation is one of the important aspects of scholarly debate. It enables scholars to illustrate the significance and relevance of their study, their experience in the field, and the validity of their claims and findings. Citing other studies serves rhetorical purposes by allowing authors to support their study in current disciplinary expertise. The analysis of research articles in Applied Linguistics and Nursing and Midwifery in English, one written by Iranian scholars (in local journals) and the other with different linguacultural background writers (in high-rank international journals), shows variation use of citation patterns. One side of the citation’s continuum style is the integral citation that easy to use, and another side is non-integral that a bit complicated. The finding of this research indicated that both types of integral and non-integral citations were employed across the four subcorpora. In the traditional view, in AL articles as a soft discipline was used more summarising, and paraphrasing, and integral and non-integral citations. However, little attention has been paid to the functions of citation practices. Thompson and Tribble hint at corpus-based pedagogy as a successful strategy in citation instruction. Therefore, a concordance program could be used for searching and analysing finding citations.

The literature review evaluation revealed that non-integral citation is a sign of expert and native writers in APA style. Furthermore, this study revealed that scholars in high-quality international journals utilised all types of citation patterns. Therefore, utilising all types of citations based on a citation style could be an essential item to reach the experts’ style. The results of this research indicate that the awareness of students and novice writers how expert writers use citations and support their claims is one of the needs for academic writing courses. Pedagogical tasks for citation practices should be developed for EAP courses to understand the functions of citations. Therefore, “citation as a literacy practice needs to be taught and learned” (Hu & Wang, 2014, p.36). Also, citation practices should not be taught in ‘isolation’ (Luzon, 2015) but focusing on paraphrasing, summarising, or synthesising, as well.

Most of the academic materials (see Swales & Feak, 2004; Bailey, 2003) focus on the quotation, summarising, and paraphrasing and integral and non-integral citations. However, little attention has been paid to the functions of citation practices. Thompson and Tribble hint at corpus-based pedagogy as a successful strategy in citation instruction. Therefore, a concordance program could be used for searching and analysing the types and the functions of citation in EAP courses for teaching citation practices based on this framework. The extent of this examination did not consider the investigation of different perspectives in this territory, which could yield fascinating outcomes. In citation patterns, the analysis of self-citations, the use of direct quotation, summary, paraphrasing, and generalisation citation could be other areas for further research.

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