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Engagement under revision: How Iranian scholars negotiate the arguability of their texts

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Abstract. Non-native English speaking (NNES) scholars face great hardship when they attempt to publish in English. Upon submitting their manuscripts to English-language journals, these scholars usually receive comments from the reviewers criticizing the rhetorical structures they adopt. One of these criticisms is concerned with how they manage the relationship between the author and the potential addressee; that is, the scholars' expression of their attitude and the way they adjust the certainty of their claims and establish a relationship with their readers. This study attempted to examine how the acceptably revised manuscripts written by Iranian scholars differ from the originally submitted versions regarding the changes happening to the *Engagement* system of the texts. Findings showed Iranian scholars' inadequate knowledge of the interpersonal weightings of the lexico-grammatical structures they used —hence giving undue credit to other researchers in the field— was mitigated by giving more space to the feature of *distance* citations, thereby failing to achieve a typically sound and rigorous argumentation.

Keywords: engagement system, revision, research article, scholarly publishing.

[es] Revisión del compromiso (engagement): cómo negocian los investigadores iraníes la argumentación de sus textos

Resumen. Los investigadores cuyo primer idioma no es inglés se enfrentan a grandes dificultades cuando tratan de publicar en esa lengua. Al enviar sus manuscritos a revistas en inglés, dichos investigadores generalmente reciben comentarios de los revisores que critican las estructuras retóricas que adoptan. Una de estas críticas se refiere a cómo manejan la relación entre el autor y el destinatario potencial, esto es, cómo los autores expresan su actitud y certeza ante los reclamos, y crean solidaridad entre ellos y sus lectores. Este estudio intenta examinar cómo los manuscritos escritos por investigadores iraníes y evaluados favorablemente difieren de las versiones originales con respecto a los cambios que ocurren en el sistema de *compromiso* (*engagement*) de los textos. El estudio demuestra que el conocimiento inadecuado por parte de los escritores iraníes de las ponderaciones interpersonales de las estructuras lexicogramaticales utilizadas —con lo que otorgan un indebido crédito a otros investigadores del campo— se mitiga si se le da más peso específico a las citas *de distancia*, no logrando de esta manera una argumentación sólida y rigurosa.

Palabras clave: sistema de compromiso, revisión, artículo de investigación, publicación académica.

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1. Introduction

To publish an article in English scientific journals is considered as a great achievement since it calls for much knowledge and effort. Scholars have to construct their argument in a way that not only matches within the existing research of the field but also puts forward a claim which often has appeal for their readers. However, publishing in English has usually become a predicament for non-native English speaking (NNES) scholars, especially those not residing in English speaking countries. In spite of the fact that NNES scholars may significantly contribute to science production (Flowerdew 2000) by spreading knowledge and experience from local contexts helping to build new theories, they may face many linguistic difficulties and challenges regarding their manuscripts' publication process. Routinely, when NNES scholars submit their manuscripts, they are satisfied with the language use. How-

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ever, revision is prompted because the journal editors later notify them that the language is inadequate or awkward. In particular, after submitting their works to international English journals, they are often given advice from the reviewers to polish the language of their texts besides the revisions suggested in the discipline-specific context. The reviewers' criticisms usually include a range of lexico-grammatical features as well as rhetorical ones. One of these linguistic problems is how interpersonal meanings are lexico-grammatically realized and conveyed (Englander 2006). That is to say, academic writing is not only about ideation, but it also carries the accomplishment of the social acts by which social meanings are revealed by the authors indicating how they hope their readers to respond to the ideational material. In other words, as an important part of scientific writing, the author has to create and maintain an authorial presence through certain rhetorical devices (Hyland 2002). A large body of research has been conducted by Hyland and his associates under the label of metalanguage and metadiscourse (Berry 2005, Schmied 2019). Within the framework of systemic functional linguistics (SFL), these are discussed under the Appraisal model (Martin & White 2005).

During the revision process, the texts experience some changes. The present study aimed to investigate how the successfully revised text differs from its originally submitted counterpart in terms of the changes happening to the themes of the text. Relying on the Appraisal model, which consists of three main branches (Affect, Engagement and Graduation), the present study is concerned with the system of engagement with the aim to reveal how Iranian scholars during the revision process create "meanings which in various ways construe for the text a heteroglossic backdrop of prior utterances, alternative viewpoints and anticipated responses" (Martin & White 2005: 97). According to this system, a basic distinction is made between utterances that are monoglossic which are also known as undialogized bare assertion and those that are heteroglossic, also called dialogistic utterance. Unlike the former, the latter indicate an alternative position or source and are classified into *contraction* (where the scope of alternative positions and voices is restricted) and *expansion* (alternative positions and voices are expanded). The former is analyzed in terms of disclaim (including deny & counter) and proclaim (including concur, pronounce & endorse). The latter is investigated based on entertain and attribute (including acknowledgement & distance).

In this study, we adopted the engagement system since according to Bakhtin (1982) and Vološinov's (1995), all verbal communication including writing for publication is dialogic. When it comes to academic writing, there are always alternative voices and positions realized lexico-grammatically by the writers who are socialized within a dialogic space of their scientific community, and this becomes particularly important for those NNES scholars whose manuscripts are found unpublishable due to linguistic inadequacies. The second reason refers to the results of the pilot study we conducted which informed us of the highly relevant nature of the system of engagement in the revisions made and its coverage of how NNES scholars make use of heteroglossic communicative acts to impress the readers (including the journal editor).

This study is therefore aimed to examine in what ways the acceptably revised texts differ from their originally submitted counterparts regarding the changes happening to the interpersonal character of the texts. Thus, to specifically fulfil the aims of the study, the following research questions stand out:

- (1) Does the interpersonal relationship of a manuscript initially submitted for publication change/improve after the revisions are applied to the text, and if so in what way does the manuscript change regarding dialogic contraction (including *disclaim* and *proclaim*) or dialogic expansion (including *entertain* and *attribute*)?
 - (2) Are these changes in proportion to the different rhetorical sections of a research article?

2. Literature Review

Appraisal gives an account of how ideational meanings are given an interpersonal flavor in discourse. Appraisal model has been defined as "... the semantic resources used to negotiate emotions, judgments and valuations, alongside resources for amplifying and engaging with these evaluations" (Martin 2000: 45). The model consists of three main categories, including Attitude, Engagement, and Graduation. Attitude is concerned with how individuals, entities, and circumstances are realized either positively or negatively through choosing certain lexico-grammatical features. Under graduation, we are concerned with values which act to provide grading or scaling. Engagement deals with how language users position themselves and are positioned vis-a-vis others; in fact, it is concerned with how language users negotiate the arguability of their utterances using the lexico-grammatical features at their disposal. These lexico-grammatical features enable the language user to assume a legitimate identity and voice within the speech community of which they claim membership. In our study, we examined how the Engagement system in the submitted manuscript is influenced when they undergo the revision process. The reason behind choosing only the Engagement system and discarding the other systems in our study was the fact that this is more concerned with the various resources by which interlocutors adjust and negotiate the arguability of their utterances, and it includes in itself concepts which have been traditionally referred to as modality, polarity, evidentiality, intensification, attribution, concession, and consequentiality. Considering the decisive role of arguability in the publication success of a piece of academic writing, all these receive an undeniable value. Therefore, in the following section, a relatively brief outline of the Engagement system is offered in order to provide the basic text-analytical tools by which the changes occurring to the texts after the revision process can be identified and distinguished.

2.1. Engagement

In order to fully understand how the semantic system of Engagement works, we need to consider the notion of *dialogism* which is adopted from the extensively significant view of the communicative acts according to Bakhtin and Voloshinov (Bakhtin 1982, Voloshinov 1995). According to this view, any piece of communication via language whatsoever is a dialogue because "it responds to something, affirms something, anticipates possible responses and objections, seeks support, and so on" (Voloshinov 1995: 139).

Therefore, under engagement, all meaning resources are dialogistic because they all acknowledge or invoke alternative views and positions that are different from ones adopted by the speaker/writer. These alternative views and positions are a means of achieving dialogic engagement. According to Martin & White (2005), engagement involves semantic configurations that are all heteroglossic as opposed to monoglossic.

Heteroglossic resources can be divided in terms of whether they are *dialogically expansive* or *dialogically contractive* as far as how the dialogic space within which language users interact verbally is concerned. What makes these two distinct is how much one utterance "actively makes allowances for dialogically alternative positions and voices (dialogic expansion), or alternatively, acts to challenge, fend off or restrict the scope of such (dialogic contraction)" (Martin & White 2005: 102). This distinction is identified for the first time in the literature by Martin & White (2005). In order to better elucidate this distinction, look at the two sentences below as examples:

Halliday (1994) showed that language is a network of systems.

Lillis and Curry (2006) claimed that academic literacy brokers confer activity of community membership.

In the first sentence, the reporting verb (i.e., show) invokes a particular stance towards what is being said, giving the listener (or the reader) the sense that the authorial voice is endorsing the external voice. This endorsing nature of this reporting verb lets the speaker (or the writer) assume an authorial voice which is in line with the truth or validity of the proposition. "By indicating in this way a heightened investment by the author and by co-opting some authoritative second party to the current rhetorical cause, such formulations set themselves against, or at least fend off, actual or potential contrary positions" (Martin & White 2005: 103). Thus in the above instance, the alternative view of the *language as something other than a network* is discredited because the verb *show* is used to maximally restrict other alternative voices. Therefore, reporting verbs like *show* create a dialogically contractive space which does not give room to dialogic alternatives.

By contrast, the space created in the second sentence is totally different due to the use of the reporting verb *claim*. The dialogic space here is expansive, leaving the proposition made in the sentence open to argument. "The effect is to invite or at least entertain dialogic alternatives and thereby to lower the interpersonal cost for any who would advance such an alternative" (Martin & White 2005: 103). In view of that, since such distancing formulations open the space for alternative positions, they can be seen as dialogically expansive.

The system network of the meaning making options according to engagement is provided by Martin & White (2005: 134):

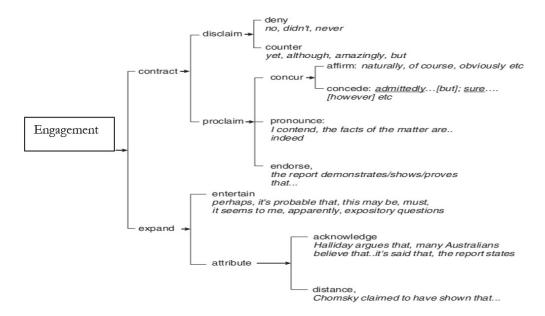


Figure 1. The Engagement system (Adapted from Martin & White 2005: 134).

2.2. Previous studies on the role of engagement in academic writing

The interactive quality of text and the negotiation of dialogic space has been the subject of scholarly discussions in the field of applied linguistics. In this respect, a sizable number of studies have adopted the engagement model in order to show, inter alia, how academic writers utilize the engagement options to position their text intertextually as well as interpersonally, to assert their authority and expertise, to signal various levels of certainty, and to create a texture that coherently presents an authorial perspective. Focusing on undergraduate geography essays, Mei (2007) showed how writers of high-rated essays assume a contrastive stance by employing certain engagement options in order to highlight potential contradictions in presenting evidence. Koutsantoni (2004) studied research article writers used appraisal resources as a tool that affects the expression of their attitude and the way they adjust the certainty of their claims and establish a relationship with their readers. She found that the authors' use of appraisal resources helps them to express authority and expertise. Relying on the engagement framework in order to examine how authors make use of expanding or contracting options in their research articles, Change and Schleppegrell (2011) highlighted the linguistic resources at the disposal of research paper writers when they introduce their studies and review related studies. More recently, in Iran, Loghmani, Ghonsooly & Ghazanfari (2020) analyzed intertextuality in the discussion section of doctoral dissertations written by PhD students of TEFL whose native language is English. According to their results, the authors employed a variety of dialogic resources to engage themselves in dialogue with their potential readers. As far as dialogic contractive and dialogic expansive resources were concerned, the authors tended to use the former more frequently in order to mitigate the possibility of being rejected or challenged by readers.

3. Methodology

3.1. Design

The data for this study consisted of two types of texts. The first one consisted of prior-to-submission texts (PS) that were written by Iranian scholars and sent to international English journals but needed major revision in terms of their English. The second included the revised published versions that we named after-publication (AP) texts. To obtain reliable results the data were analyzed quantitatively and qualitatively. In the quantitative phase, the frequencies and percentages of the sub-types of the Engagement system in different rhetorical sections of research articles (i.e., IMRD) of the PS and AP texts were computed to find the more common changes occurring in the texts and to see whether the differences between the frequencies of the PS and AP texts are significant. Being aware of Ravelli's (2000: 29) caution that "there is nothing intrinsically valuable in being able to identify a constituent [of the lexico-grammar] for its own sake", the qualitative analysis was also done on a fraction of the corpus (one-third or 20 of the whole articles). This analysis not only complemented the quantitative analysis but also compared the original unrevised clauses with their revised counterparts to illuminate the following points:

- 1. the nature of the transformations made into the different rhetorical sections of the RA.
- 2. the extent to which these transformations are proportional to some sub-types of Engagement system.
- 3. the quality and characteristics of changes achieved during the revision that make the text publishable.

In other words, instead of providing percentages and frequencies of the different features of the Engagement system to see the types of the revisions made to the texts, the purpose of the qualitative analysis was to illustrate better the nature of the changes to the texts from PS to AP. This data analysis focused on the changes made to clauses of PS texts as compared with their AP counterparts. The extracts used for this type of analysis were chosen based on purposive sampling. In short, while the quantitative analysis was concerned with *what* and *how much* of the changes, the qualitative one dealt with the *how* and *why* of these changes.

3.2. Pilot study

We conducted a pilot study on five manuscripts which were later included in the manuscripts selected for the main phase of the study. The purpose was to test the appropriateness of the methodology in terms of the analytical tools employed, the disciplines in which the articles are published, the final number of manuscripts to be collected, the number of scholars to be interviewed and the time limits. Pilot results were used to adapt and modify those methodological issues that were proved to be infeasible.

As far as the selection of disciplines was concerned, since the rate and number of English publications of Iranian scholars in the fields of Social Sciences, Arts, and Humanities are proportionally less than those of Iranian scholars in medical sciences (e.g. Kharabaf & Abdollahi 2012), we decided to narrow the scope of our study to only manuscripts from the fields of Sciences and Medical Sciences. Concerning the number of manuscripts to be collected and time limits, we decided to collect 60 manuscripts (30 from each general discipline) for two reasons: the first was related to

the very difficult nature of data collection. That is, one can have access to the manuscripts just through finding their authors and convincing them for cooperation (For a detailed account of how we accessed these texts see Maniati, Hayati & Jalilifar 2015). The second dealt with a large number of data to be analyzed. In this study, the whole article (i.e., IMRD) was investigated while the previous studies done on research article mainly focused on the Introduction and Discussion sections. Finally, our analysis of pilot data revealed that exploiting Appraisal model (specifically Engagement system) as a framework proved to be helpful to examine the changes made during the revision process.

3.3. Data collection

In order to understand the linguistic changes that Iranian scholars make to their manuscripts which are accepted for publication after initial rejection for reasons that include language use, the following text samples were collected:

- 1. The original manuscript submitted to an ISI journal which is within a source normalized Impact Factor range —measures *contextual* citation impact and enables direct comparison of journals in different subject fields— in the discipline in which the scholar practices. In order to obtain this range, experts in each discipline were consulted.
 - 2. The published article.
- 3. Correspondence from the journal editor pointing to the problematic language used in the originally submitted manuscript (This was intended to make sure that problematic language was one of the reasons for the initial rejection of the manuscript).

Finally, 60 originally submitted manuscripts totalling 271,320 words (discarding the appendices and references) and their final published versions totalling 214,342 words (discarding the appendices and references) in 41 journals from January 2011 to March 2014 were collected. (See Appendix A). Since the word counts in the two text sets were different, we normalized them by multiplying the quantities of PS texts into 0.79.

3.4. Data analysis

To perform the analysis, we examined the changes made in different sections of the manuscripts (i.e., Introduction, Method, Results and Discussion), prior to submission and after publication, regarding dialogic contraction or dialogic expansion. In other words, this study sought to investigate whether the changes lead the texts to be more dialogically contracted or expanded.

Therefore, the interpersonal metafunction was coded for the salient features of Engagement system (Martin & White 2005) which was divided into *contraction* (including disclaim: deny, disclaim: counter, and proclaim: concur, proclaim: pronounce and proclaim: endorse) and *expansion* (including entertain and attribute: acknowledgement and attribute: distance). Our focus was on the system of engagement to show how Iranian scholars during the revision process create the text as a heteroglossic place for negotiating their arguments, viewpoints and anticipated responses. (Martin & White 2005: 97).

In order to code the data and to find the related tokens, we did not make use of computer software since the process of finding the tokens which are indicative of the author's stance is subjective and is highly dependent on the cotext of the tokens to be identified. However, in order to improve reliability of coding and avoid subjective judgment, certain textual features could be highlighted. For example, when research article writers want to cite a proposition from another source, reporting verbs play an important role in the expression of attitudes toward that proposition (Hyland 2002), and are "the clearest signals of the presence of evaluation" (Thompson & Ye 1991: 369). Therefore, drawing on Hu and Wang (2014), we identified common English reporting verbs that usually signal the stance and judgment of the authors. Of course, we did not limit our analysis to verbs since sometimes the act of reporting is done by means of nominal structures (e.g., contention, rejection, corroboration). Other appraisal resources which can help us in the coding process involve nouns (e.g., attainment, absence), adjectives (e.g., critical, leading, considerable), comment and conjunctive adverbs (e.g., surprisingly, in other words, undoubtedly). We used these lexical resources as a general guide in inferring writer stance because we were careful of Martin and White's (2005: 52) notion that, "a given lexical item will vary its attitudinal meaning according to [its co-text]". For example, making decisions on conjunctives which are often part of the co-text and used together with other attitudinal expressions would not be possible without considering their co-text in order to find how they signal logical relationships and indicate writer stance.

The whole corpus was quantitatively analyzed in terms of textual revisions. Nevertheless, to omit or at least minimize subjectivity, the analysis was also performed on two sections (i.e., Introduction and Discussion) of 20 per cent of data randomly chosen by the researchers (called raters 1, 2 and 3) twice with an interval of more than one month. Similarly, to obtain higher validity of the corpus for statistical analysis, again the process types of 20 per cent of the sample were re-coded with an interval of more than one month. Then, to test the inter-coder reliability, Kappa coefficient (k) was exploited, and the reliability index for the consistency of analysis (first and second coding) of the data was (k=0.905). In addition to analyzing data by use of descriptive statistics through frequency tables, inferential statistics involving Chi-square test was done to see whether there are any possible significant discrepancies among variables (The results of all Chi-square test are provided in Appendix B).

Finally, to scrutinize the nature of the changes made to the texts from PS to AP, the qualitative analysis was performed to the corpus, including four sample sections of the RA (IMRD). This analysis tried to realize the changes made to clauses, within the Engagement system, of PS texts as compared with their AP counterparts.

4. Results

4.1. Quantitative findings

In this section, the frequencies of different Engagement elements across IMRD sections of PS and AP texts are presented. The quantification of the different engagement resources is shown in Tables 1 and 2. (For bar charts of the same tables see Appendix C).

The PS and AP texts differed in the frequency of bare assertions. The number of *bare assertion* in PS texts was significantly higher than that in AP texts. However, the AP texts tended to be more furnished with engagement resources across the four sections generally and in the Introduction and Discussion in particular wherein the dialogically expansive option of *entertain* was more frequently used.

		Introduction	Method	Results	Discussion	Total
Dialogistic	disclaim: deny	414.75	285.98	321.53	248.85	1271.11
contraction	disclaim: counter	651.75	51.35	192.76	271.76	1167.62
	proclaim: concur	48.19	0.00	25.28	30.02	55.30
	proclaim: pronounce	88.48	0.00	24.49	50.56	163.53
	proclaim: endorse	723.64	84.53	165.90	235.42	1209.49
Dialogistic	entertain	133.51	7.11	7.90	190.39	338.91
expansion	attribute: acknowledge	753.66	38.71	86.90	268.60	1147.87
	attribute: distance	132.72	0.00	15.01	151.68	299.41
Monologistic	bare assertion	2188.30	1354.85	1554.72	1350.11	6447.98

Table 1. Engagement elements in different sections of the PS RAs.

Table 2. Engagement elements in different sections of the AP RAs.

		Introduction	Method	Results	Discussion	Total
Dialogistic	disclaim: deny	347	251	274	131	1003
contraction	disclaim: counter	871	41	95	509	1516
	proclaim: concur	73	5	39	76	193
	proclaim: pronounce	133	8	60	80	281
	proclaim: endorse	592	61	112	158	923
Dialogistic	entertain	602	28	99	690	1419
expansion	attribute: acknowledgement	597	15	56	116	784
	attribute: distance	549	0.00	10	340	736
Monologistic	bare assertion	1602	1285	1346	983	5216

Overall, the most commonly employed expansive heteroglossic feature in both PS and AP texts was *entertain*. There was also a significant difference between the number of *acknowledge* and *distance*, with the *distance* option in the AP texts outnumbering that in the PS texts. As far as the dialogically contractive features were concerned, the PS and AP texts used *disclaim* in almost similar percentages with tokens representing *deny* outnumbering those representing *counter* features across the PS RAs while in AP RAs the latter outnumbered the former. As regards *disclaim*, both PS and AP texts had more or less an equal frequency of these features. However, the PS texts consisted of a higher percentage of the contractive option *endorse*.

As far as the different rhetorical sections of an RA are concerned, the Introduction had the highest number of dialogic contraction elements in PS text. The same was also observed for AP texts, except for *concur* which had fewer tokens in the Introduction section compared with the Discussion section. As far as dialogic expansion was concerned in PS texts, *entertain* and *distance* were most considerable in the Discussion section followed by the Introduction section, which had the highest number of *acknowledge*. The same was again observed for AP texts. That is, the Discussion section had the greatest number of *entertain* and *distance* while the Introduction section had the highest number of *acknowledge*.

4.2. Qualitative findings

In this section, extracts from PS and AP texts are presented in order to describe the changes made to the texts.

As indicated in the results, *entertain* was the most commonly used heteroglossic feature in both PS and AP texts. The frequent lexico-grammatical realization of *entertain* in the PS texts included the modal finites *can* and *may*, while in AP texts this involved the modal finites *could*, *may*, *can*, and *would* along with the conjunctions *whether* and *if*.

Consider the following examples (note that letter a here indicates before revision and letter b shows after revision):

- (1a) MTHFR gene mutations can slightly increase the risk of arterial or venous thrombosis.
- (1b) MTHFR gene mutations can could slightly increase the risk of arterial or venous thrombosis.
- (2a) In conclusion, the wide distribution and genetic variation is due to different nutritional regimen and races.
- (2b) In conclusion, the wide distribution and genetic variation is <u>may be</u> due to different nutritional regimen and races.

These are also known in literature as evidentiality (Chafe & Nichols 1986), modality (Halliday 1994), and hedging (Hyland 1998) and are in accordance with the findings of Salager-Meyer (1994) and Skelton (1988), according to whom NNES authors have the tendency to use fewer hedging devices compared to NS writers, and this can be attributed to their poor language skills.

The proportion of modals remained more or less constant between the two versions, and it remained practically low in PS texts. The modals *can* and *could* are used frequently in PS texts and AP texts. However, there were occasions at which there seemed to be instances of the improper use of the modal *can* with an epistemological verb, i.e. *question*. While in Persian, it is perfectly acceptable to say that "*people can think that*", or "*can question*", it is more typical in English to use *can* with action verbs. Using a different modal such as *might* or *may* would be more typical of English usage. The range of modals available in Persian is more limited than English, causing some unusual constructions when Iranians write in English. (Rahimian & Vahedi 2010)

Our qualitative analysis showed that a considerable amount of text modification during the revision process involved these two options, namely a departure from *acknowledge* to *distance*. The following revision is a case in point:

- (3a) The subcooled flow boiling heat-transfer characteristics of water and ethanol solutions in a vertical annulus have been reported to be up to heat flux $132kW/m^2$.
- (3b) The subcooled flow boiling heat-transfer characteristics of water and ethanol solutions in a vertical annulus have been reported claimed to be up to heat flux $132kW/m^2$.
- In (3a), for example, an acknowledgement is made about what has been found in the work cited, but by using the verb *report* does not tell us anything about the authors' position vis-à-vis the proposition conveyed. In (3b), on the other hand, the verb claim makes an indication that the author is dissociating themselves from the results of a previous study. Such revisions were usually done when the writer would later make a claim or proposition not totally in agreement with the proposition made by the other voice. Acknowledgement was typically signaled by reporting verbs such as *say*, *report*, and *state*, while distance was generally realized by verbs *claim* and *maintain*.

According to our results, *counter* tokens were commonly realized by the conjunctive adverb *however*, followed by subordinating conjunction *although*, and coordinating conjunction *but*.

- (4) In fact, numerous studies have extensively focused on the relationship between FEP and firm characteristics. **However**, the environmental effect of managerial attitudes has remained an open question.
- (5) On the basis of the coolant fluid component(s), conducted researches may be sorted in terms of investigation on the subcooled flow boiling heat transfer to either pure liquids or mixtures, **although** the main object of this experimental study is to investigate the latter group of test fluids.

The more or less equal frequency of *disclaim* in both PS and AP texts suggests that Iranian writers are at least good at using this semantic resource to show their position when dealing with contradictory data. Of course, they seem to

be using *counter* not very skilfully, but their skill to acknowledge or counter possible different positions in order to assume their authorial stance can hardly be underestimated.

However, the PS texts consisted of a larger number of tokens showing *endorse* which seemed to be carefully exploited in the AP texts where the writers tended to make fewer alignments to a source cited, and in so doing, they did not fully endorse the content expressed by another writer or researcher as maximally warrantable. The Introduction and Discussion sections showed the greatest amount of differences in *endorse* while in Methodology and Results the number of tokens representing this engagement option was virtually similar in both PS and AP texts.

Changes made to the PS texts regarding *endorse* were mostly related to changes in the reporting verbs or using phrases indicating the presence of a citation accompanying a clause. For example, consider the following extract:

- (6a) Some studies have shown that combination of vitamins with other antioxidants produce synergistic effects.
- (6b) Some studies have shown indicated that combination of vitamins with other antioxidants produce synergistic effects.

The reporting verb *show*, which implies a very high degree of warrantability is replaced with *indicate*, by virtue of which the reported proposition is rendered less warrantable. This is done either to secure the position of the author regarding the truth value of the reported proposition or to set the scene for a later criticism of that proposition.

In creating interpersonal meaning, *endorse* positions the writer's work in relation to other authors, and emphasizes or de-emphasizes the role of other authors. For example, in the Introduction sections of PS texts, *endorse* was linguistically realized within the clause in a number of ways: as a participant, as a phrase in the form of "*according to x*", or as the agent in a passive such as "*a finding was proved by x*." In PS texts, 55% of the citations were integral (i.e., presented within the clause).

However, in the Introduction sections of AP texts, this positioning of citations is reduced. The alternate technique of attribution is placing the attributor in parenthesis at the end of a clause. In this way, both *mental* and *verbal* processes are decreased, especially those whose participants are other researchers. For example,

- (7a) Kellogg and Griffin (2006) believe that fungal spores and pollens can be transported to thousands of kilometres in the presence or absence of dust.
- (7b) *Kellogg and Griffin (2006) believe that* Fungal spores and pollens can be transported to thousands of kilometres in the presence or absence of dust. (*Kellogg and Griffin, 2006*).

Overall, it seems that unlike Methods and Results which tend to be more monoglossic, the Introduction and Discussion sections are places for dialogic negotiations. Therefore, as far as the Engagement resources are concerned, such claims are made in the literature elsewhere (Bahrami & Riazi 2009, Feldman 2004, Flowerdew 1999, Gosden 1995, St. John 1987, Swales & Feak 1994). Moreover, rhetorically speaking, there is an affinity between the Introduction and Discussion sections which MacDonald (2002: 453) believes to be "the zones in which the writer(s) negotiate with their peers for 'research space' [...] for their findings," while in "the Methods and Results section, argumentation is elided and the writer appears to assume that he/she can take understanding of a range of shared meanings for granted". However, Hyland (2005: 190) warns us that it might be unwise to divide "research papers into rhetorically simple and detached Methods and Results, and complex, subjective and author-centred Introductions and Discussions" because, he maintains, "even the most rhetorically innocent sections reveal writers' efforts to persuade their audience of their claims, so that stance and engagement are likely to figure, in different ways, across the research paper." Nevertheless, the data analyzed in this study did not seem to lend support to this caution.

5. Discussion

In academic writing, there should be a careful balance of factual information and social interaction (Swales 1990), and to achieve this balance in scientific writing, interpersonal meaning mainly manages the relationship between the author and the reader. In other words, as an important part of scientific writing, the author has to create and maintain an authorial presence through certain rhetorical devices. This was a main part of the revision process in the texts we analyzed. In our study, the interpersonal metafunction was coded for the salient features of *contraction* (including disclaim: deny, disclaim: counter, and proclaim: concur, proclaim: pronounce and proclaim: endorse) and *expansion* (including entertain and attribute: acknowledgement and attribute: distance).

In creating interpersonal meaning, *attribute* positions writers' work in relation to other authors, either disassociating them from the attributed material (*distance*), or acknowledging their dependence on previous developments in the discipline for their own new and original claims (*acknowledge*). In our study, as far as attribution was concerned, revising authors tended to increase the role of other researchers by increasing the number of times they attribute statements to the work of others. By so doing, they gave greater visibility to others in the field, and thereby position their own work with a greater sense of recognition of those who have come before. This is in line with the results of Chang & Schleppegrell (2011), who found that authors used high proportions of "Attribute"

resources to introduce research already conducted and relate it to the current study. This could also have a bearing on the construction of different author identities such as one conveying "solidarity and alignment" with the source writer or, in contrast, an identity as a "plagiarist" and not as an author, according to a study conducted by Abasi, Akbari & Graves (2006: 108-111).

NNES scholars of course possess the knowledge about citation practices; after all they are already scholars in their L1. However, when it comes to doing this in their own texts, these scholars may not have the required linguistic skills as their English L1 counterparts. In this respect, Okamura & Shaw (2000) confirmed this in their study of cover letters authored by NNES scholars and English L1 professionals.

In addition, we need to be careful in our interpretation of the revisions made to the citations since citation practices can vary in remarkable ways across disciplines (Charles 2006, Hyland 1999, 2000) and cultures (Bloch & Chi 1995), posing major challenges to L2 writers. For example, Hu and Wang (2014) found a distinction between applied linguistics and medical texts as far as different sources of dialogic engagement were concerned. According to their results, research articles written in applied linguistics were more characterized with dialogically expansive citations while those in medical sciences were more likely to employ dialogically contractive citations. Since our study did not consider disciplinary variation, we do not dwell on the rhetorical and linguistic complexity of using citations in different disciplines and the inherent challenges to mastering appropriate citation usage. However, culturally motivated citation practices should be focused upon with a view to inform EAP writing instruction.

In a cross-cultural study, Bloch and Chi (1995) compared American and Chinese citation practices across disciplines in terms of the dates of citations (e.g., the recentness of the texts referred to?), and the function of citations (e.g., as background, support, or critical). They found noticeable differences between the American and the Chinese citation practices. The Chinese were reported to tend to use older texts and use proportionately fewer citations as opposed to their American counterparts. Also, while both academics from the two language groups were almost similar in terms of the citation practices, the citations employed by the Chinese were less intended to support their arguments compared with their American counterparts. For sure, findings such as these lend support to the claim that Iranian scholars (who are from different cultural backgrounds) approach metadiscourse (of which citation practices are an important example) in evidently distinctive ways, and this is likely to bring about some difficulties for them adapting to the writing conventions of Anglophone academia.

However, what is not sure is the way Iranian culture contributes to the use of this engagement practice in academic writing, and in fact, findings of different studies are mixed in this regard. For instance, while Abdi (2009) believes that the use of interactional metadiscourse markers (e.g. engagement markers) depend more on the national culture than conventions of generic and discursive practices of the broader academic community, Shokouhi & Talati Baghsiahi (2009), however, contend that the Persian writers are less interested in explicitly organizing the texts and orienting to the readers.

While accepting the influence of L1 culture on the interpersonal meaning making in RAs in general and citation in particular, we believe that the revisions made to this interpersonal element of meaning making in texts were predominantly motivated by the awareness of the discoursal expectations of the discourse community to gain acceptance and gradually making the writers established members of their communities. However, it seems that Iranian writers regard all reporting verbs to be neutral devices for citation of other works and not as a device for conveying their alignment with or dissociation from other works. Of course, this does not mean they are unaware of the imperative to make the decision as to whether acknowledge others or promote the distance between their voice and that of others because they might signal this by other linguistic or rhetorical devices. However, our contention is that they seem to ignore the role of reporting verbs in carrying such interpersonal weightings.

In addition, revisions to these texts tend to increase the amount of *entertain* such that direct or sweeping statements are softened acknowledging a proposition as one possibility amongst others typically through the use of modals. These changes have the effect of lessening the reader's impulse to disagree. In this way, they soften or mitigate the directness of their statements. Through *entertain*, the scholars lessen the opportunities for the reader to challenge their assertions, as the assertions themselves are less bald. Examples include the use of *likely*, *could be* and *seem*. According to Mei (2006), the writers' strategic employment of these semantic resources using modal verbs signifying *entertain* can have a substantial contribution to the process in which they construe their stance while presenting their position vis-à-vis alternative views. Therefore, consciousness-raising in these engagement resources can bring about significant improvement in the texts written by novice writer. This was particularly evident in the Discussion section wherein the mood adjuncts resided in the Finite and those in the Residue underwent the greatest change.

It is important to note that adjusting claims to the intended level can be especially difficult for non-native speakers of English. Lack of familiarity with these resources of academic discourse may cause enormous difficulties for the Iranian scholars who seek membership in a disciplinary community. Given the astonishingly wide variety and range of linguistic possibilities for stating one's knowledge claims, the writer's options in formulating the claim are decidedly complex. For example, modals are a conventional means of hedging in different languages. However, as stated in the Result section, while in Persian, it is perfectly acceptable to say that "people can think that", or "can question", it is more typical in English to use can with action verbs. Using a different modal such as might or may would be more typical of English usage, the range of modals available in Persian is more limited than English, causing some unusual constructions when Iranians write in English.

When it comes to combining modals with other hedging devices, the writers are overwhelmed by the further subtlety, as in "x may seem to indicate" or "x could possibly be explained by y" (Englander 2014: 32). This complexity could be explained by the fact that different languages may have different conventions regarding the legitimate use of hedging or boosting, and this might be totally different from the conventions practiced in scientific writing in English. Therefore, when trying to use these devices in their texts, NNES scholars need to consider not only their propositions' level of generalization and certainty in their own language but also the journal editors and reviewers from the scientific community who act as gatekeepers for the publication of their work. Therefore, it seems necessary for these scholars to be educated on the effective and strategic use of these resources. We can get more insights into this by doing research on rhetorical competence.

The existing differences can be further attributed to the Persian rhetoric. According to Hinds (1987), there are two kinds of rhetoric: writer-responsible rhetoric and reader-responsible rhetoric. In the former, it is the writer who is primarily responsible for effective communication, and this is done by using a number of rhetoric devices. The latter, however, the interpretation of the text is left to the reader. Therefore, "while in Persian writing, a reader-responsible language, writers use a less hedged discussion and readers are assumed to infer much from the text, English texts, writer-responsible, allow more hedges in discussion and guide readers through the text" (Jalilifar 2011: 184).

Our results showed that as far as the dialogically contractive features were concerned, the Introduction section in both PS and AP texts used *disclaim* in almost similar percentages with tokens representing *counter* outnumbering those representing *deny* features across the RA as a whole. In this section, writers opted for dialogically expansive passive constructions to establish a research gap, state a problem or set the grounds for occupying the research space. They then chose dialogically contractive counter resources to express commitment when they refer to the rationale of the study at the end of the section. These *counter* resources are often used to initiate what Swales (1990) refers to as "establishing a niche," by indicating a gap in the current research territory. Hood (2010) considers these engagement resources as academic research warrants in research article introductions. *Counter* resources signal a shift from alignment with the reader to disalignment, as the author creates space for his/her own study (184). However, the use of these contractive patterns in the Introduction generates a mutually respectful writer/reader relationship "that implicitly closes down the space for alternative views on the part of the readership" (Pérez-Llantada Auría 2011: 31).

Overall, our qualitative analysis of the Engagement resources shows that the revisions made in the analyzed research articles were aimed to achieve a number of functions which are in line with previous research. These mainly include projecting an image of honesty and humility (Swales 1990: 433), tentatively conveying propositions to make them less challengeable by readers (Salager-Meyer 1994: 150), and expressing positive and negative politeness (Myers 1989, Varttala 1999). When making claims, hypothesizing, explaining or asserting empirical evidence, authors are expected to exercise great caution to show that they care about their readers because their propositions may be interpreted as impolite if not expressed in an acceptable manner.

However, the problem of making scientifically acceptable claims is not always linguistic in nature. Recent research (notably conducted by Lillis & Curry 2010) has been concerned with the fact that journal reviewers' sensitivity towards their contributors' claim making is geopolitically determined, putting scholars outside the inner circle countries at a disadvantage. Scholars from these regions face difficulties in "attempting to make a significant contribution in their papers because of reviewers' insistence on geographic limitation of the work" (Lillis & Curry 2010: 139). Lillis & Curry (2010) give the example of a Spanish psychologist and a Hungarian educator who were asked by journal reviewers about how relevant their work was to an English-language journal, because according to these reviewers' assumption, "studies done outside the Anglophone world... are not considered relevant" to the Anglophone context (142). When receiving such comments, these scholars cannot easily make a claim about their work. Therefore, it is not only the scientific content that counts when NNES scholars intend to negotiate their claims in their manuscripts. Rather, their status in the scientific community, their country of origin, and their first language will have a profound effect.

6. Conclusion

NNES scholar who wish to publish their work in a mainstream English journal often experience the notoriously complex revision process. Thus, given its role as a process meanings are negotiated socially and collaboratively, revision can influence the NNES scholars' chance of getting published and our study was aimed to provide more insights in this regard.

Composing a research article involves careful observation of the published articles of the old timers with the aim of finding the established cultural and rhetorical practices therein. Of course, this would bring about its own difficulties for NNES scholars, mainly in terms of a variety of linguistic challenges, including rhetorical and argumentative skills (see, for example, Flowerdew 2013).

Findings clearly showed as far as interpersonal meaning-making was concerned, *entertain* increased through the use of modals and softeners, while bare assertions were decreased. The overuse of *endorse* and acknowledge which was possibly due to the Iranian scholars' lack of knowledge of the interpersonal weightings of the reporting verbs

they used —and hence giving undue credit to other researchers in the field— was mitigated by giving more space to the feature of *distance* citations, and thereby failing to the achieve a typically sound and rigorous RA argumentation.

It should also be noted that the alterations made to the texts at the ideational, interpersonal and textual strata are clearly important. They are all done to achieve a voice which is both personal and disciplinary. In fact, RA is a site for knowledge construction which is achieved through the medium of writing, and this process does not occur in a social vacuum and outside particular communities of practice (Hyland 2005). The binding factor that brings cohesion to these communities of practice are "a shared set of assumptions and routines about how to collectively deal with and represent their experiences" (191). However, this does not mean that the community in which you are practising always offers you the ways in which linguistic sources are to be exploited. The disciplinary voice that novice writers should achieve is not granted to them by a set of shared assumptions. It is achieved only through participating in the activities of that community supervised by some powerful old members. Practising the act of revision is a typical example of practising in the community of practice through which the NNES scholars, surrounded by the reviewers' comments, acquire a voice that is both personal and disciplinary.

For NNES scholars who wish to achieve recognition in their scientific community, mastering the engagement resources of academic discourse is an indispensable condition. The knowledge and mastery of these resources can play a decisive role when they want to establish their claims and negotiate meaning during the revision process. One way to achieve this is through offering university in-service courses for novice NNES scholars. No doubt that all these would contribute to the transformation of a relatively immature unpublishable piece of writing into a well-crafted mature version. However, this is a necessary but not a sufficient condition for the texts to be published.

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APPENDICES

Appendix A

Journals in which the articles were published:

Aerobiologia

Agricultural Water Management

Applied Radiation and Isotopes

Biological Conservation

Ceramics International

Chemical Industry & Chemical Engineering Quarterly

Computer Methods in Applied Mechanics and Engineering

Construction and Building Materials

Depression and Anxiety

Electric Power Systems Research

Environment and Development Economics

Environmental Modelling & Software

Enzyme and Microbial Technology

European Psychiatry

Experimental Thermal and Fluid Science

Gene

Heart, Lung and Circulation

Indagationes Mathematicae

Information Sciences

International Journal of Cardiology

International Journal of Heat and Mass Transfer

International Journal of Hydrogen Energy

International Journal of Surgery

Journal of Industrial and Engineering Chemistry

Journal of Applied Mathematics, Statistics and Informatics

Journal of Cardiovascular Computed Tomography

Journal of Natural Gas Science and Engineering

Journal of Obstetric, Gynecologic, & Neonatal Nursing

Materials Characterization

Maternal & Child Nutrition

Mathematical and Computer Modelling of Dynamical Systems

Mental Health and Substance Use

Optics & Laser Technology

Polyhedron

Progress in Organic Coatings

Psychiatry Research

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

Surface and Coatings Technology

The Annals of Occupational Hygiene

The Journal of Supercritical Fluids,

The Journal of Thoracic and Cardiovascular Surgery

Ultrasonics Sonochemistry

Appendix B

Results of Chi-square test of Engagement system:

Deny: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
347.00	347	381.0	-34.0
414.75	415	381.0	34.0
Total	762		

Method				
	Observed N	Expected N	Residual	
251.00	251	268.5	-17.5	
285.98	286	268.5	17.5	
Total	537			

Results			
	Observed N	Expected N	Residual
274.00	274	298.0	-24.0
321.53	322	298.0	24.0
Total	596		

Discussion			
	Observed N	Expected N	Residual
131.00	131	190.0	-59.0
248.85	249	190.0	59.0
Total	380		

Test Statistics		
VAR00001		
Chi-square	6.068ª	
df	1	
Asymp. Sig.	.014	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 381.0.

Test Statistics		
VAR00002		
Chi-square	2.281ª	
df	1	
Asymp. Sig.	.131	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 268.5.

Test Statistics		
VAR00003		
Chi-square	3.866a	
df	1	
Asymp. Sig.	.049	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 298.0.

Test Statistics			
VAR00004			
Chi-square	36.642ª		
df	1		
Asymp. Sig.	.000		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 190.0.

Total			
	Observed N	Expected N	Residual
1003.00	1003	1137.0	-134.0
1271.11	1271	1137.0	134.0
Total	2274		

Test Statistics		
VAR00005		
Chi-square	31.585ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1137.0.

Counter: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
651.75	652	761.5	-109.5
871.00	871	761.5	109.5
Total	1523		

Test Statistics		
VAR0000		
Chi-square	31.491ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 761.5.

Method			
	Observed N	Expected N	Residual
41.00	41	46.0	-5.0
51.35	51	46.0	5.0
Total	92		

Test Statistics		
	VAR00002	
Chi-square	1.087ª	
df	1	
Asymp. Sig.	.297	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 46.0.

Method			
	Observed N	Expected N	Residual
95.00	95	144.0	-49.0
192.76	193	144.0	49.0
Total	288		

Test Statistics		
VAR00003		
Chi-square	33.347ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 144.0.

Discussion			
	Observed N	Expected N	Residual
271.76	272	390.5	-118.5
509.00	509	390.5	118.5
Total	781		

Test Statistics		
VAR00004		
Chi-square	71.919ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 390.5.

Total			
	Observed N	Expected N	Residual
1167.62	1168	1342.0	-174.0
1516.00	1516	1342.0	174.0
Total	2684		

Test Statistics		
VAR00005		
Chi-square	45.121ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1342.0.

Concur: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
48.19	48	60.5	-12.5
73.00	73	60.5	12.5
Total	121		

Test Statistics		
VAR00001		
Chi-square	5.165ª	
df	1	
Asymp. Sig.	.023	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 60.5.

Method			
	Observed N	Expected N	Residual
5.00	5	5.0	.0
Total	5ª		

a. This variable is constant. Chi-Square Test cannot be performed.

On at least	one case, the value of the
weight vari	able was zero, negative, or
missing. Su	ich cases are invisible to
statistical p	rocedures and graphs which
need positi	vely weighted cases, but
remain on	the file and are processed by
non-statisti	cal facilities such as LIST
and SAVE.	

Results			
	Observed N	Expected N	Residual
25.28	25	32.0	-7.0
39.00	39	32.0	7.0
Total	64		

Test Statistics		
VAR00003		
Chi-square	3.063ª	
df	1	
Asymp. Sig.	.080	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.0.

Discussion			
	Observed N	Expected N	Residual
30.02	30	53.0	-23.0
76.00	76	53.0	23.0
Total	106		

Test Statistics		
VAR00004		
Chi-square	19.962ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 53.0.

Total			
	Observed N	Expected N	Residual
55.30	55	124.0	-69.0
193.00	193	124.0	69.0
Total	248		

Test Statistics		
VAR00005		
Chi-square	76.790ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 124.0.

Pronounce: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
88.48	88	110.5	-22.5
133.00	133	110.5	22.5
Total	221		

Test Statistics		
VAR00001		
Chi-square	9.163ª	
df	1	
Asymp. Sig.	.002	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 110.5.

Method			
	Observed N	Expected N	Residual
8.00	8	8.0	.0
Total	8ª		

a. This variable is constant. Chi-Square Test cannot be performed.

On at least one case, the value of the	
weight variable was zero, negative, or	
missing. Such cases are invisible to	
statistical procedures and graphs whic	h
need positively weighted cases, but	
remain on the file and are processed by	y
non-statistical facilities such as LIST	
and SAVE.	

Introduction			
	Observed N	Expected N	Residual
24.49	24	42.0	-18.0
60.00	60	42.0	18.0
Total	84		

Test Statistics		
VAR00003		
Chi-square 15.429 ^a		
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 42.0.

Discussion			
	Observed N	Expected N	Residual
50.56	51	65.5	-14.5
80.00	80	65.5	14.5
Total	131		

Test Statistics		
VAR00004		
Chi-square 6.420a		
df	1	
Asymp. Sig.	.011	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 65.5.

Total			
	Observed N	Expected N	Residual
163.53	164	222.5	-58.5
281.00	281	222.5	58.5
Total	445		

Test Statistics		
VAR00005		
Chi-square 30.762 ^a		
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 222.5.

Endorse: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
592.00	592	658.0	-66.0
723.64	724	658.0	66.0
Total	1316		

Test Statistics		
VAR00001		
Chi-square 13.240 ^a		
df 1		
Asymp. Sig000		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 658.0.

Method			
	Observed N	Expected N	Residual
61.00	61	73.0	-12.0
84.53	85	73.0	12.0
Total	146		

Test Statistics		
VAR00002		
Chi-square 3.945 ^a		
df	1	
Asymp. Sig.	.047	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 73.0.

Results			
	Observed N	Expected N	Residual
112.00	112	139.0	-27.0
165.90	166	139.0	27.0
Total	278		

Test Statistics		
VAR00003		
Chi-square 10.489a		
df 1		
Asymp. Sig001		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 139.0.

Discussion			
	Observed N	Expected N	Residual
158.00	158	196.5	-38.5
235.42	235	196.5	38.5
Total	393		

Test Statistics			
VAR00004			
Chi-square 15.087 ^a			
df 1			
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 196.5.

Total			
	Observed N	Expected N	Residual
923.00	923	1066.0	-143.0
1209.49	1209	1066.0	143.0
Total	2132		

Test Statistics			
VAR00005			
Chi-square	38.366ª		
df	1		
Asymp. Sig.	.000		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1066.0.

Entertain: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
133.51	134	368.0	-234.0
602.00	602	368.0	234.0
Total	736		

Test Statistics			
VAR00001			
Chi-square	297.587ª		
df	1		
Asymp. Sig.	.000		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 368.0.

Method			
	Observed N	Expected N	Residual
7.11	7	17.5	-10.5
28.00	28	17.5	10.5
Total	35		

Test Statistics			
VAR00002			
Chi-square	12.600ª		
df	1		
Asymp. Sig.	.000		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.5.

Results			
	Observed N	Expected N	Residual
7.90	8	53.5	-45.5
99.00	99	53.5	45.5
Total	107		

Test Statistics			
VAR00003			
Chi-square	77.393ª		
df	1		
Asymp. Sig.	.000		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 53.5.

Discussion			
	Observed N	Expected N	Residual
190.39	190	440.0	-250.0
690.00	690	440.0	250.0
Total	880		

Total			
	Observed N	Expected N	Residual
338.91	339	879.0	-540.0
1419.00	1419	879.0	540.0
Total	1758		

Test Statistics			
VAR00004			
Chi-square 284.091a			
df	1		
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 440.0.

Test Statistics			
VAR00005			
Chi-square 663.481a			
df 1			
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 879.0.

Acknowledgement: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
597.00	597	675.5	-78.5
753.66	754	675.5	78.5
Total	1351		

Method			
	Observed N	Expected N	Residual
15.00	15	27.0	-12.0
38.71	39	27.0	12.0
Total	54		

Results			
	Observed N	Expected N	Residual
56.00	56	71.5	-15.5
86.90	87	71.5	15.5
Total	143		

Test Statistics		
VAR00001		
Chi-square	18.245ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 675.5.

Test Statistics			
VAR00002			
Chi-square 10.667 ^a			
df 1			
Asymp. Sig001			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 27.0.

Test Statistics		
VAR00003		
Chi-square	6.720a	
df	1	
Asymp. Sig.	.010	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 71.5.

Discussion			
	Observed N	Expected N	Residual
116.00	116	192.5	-76.5
268.60	269	192.5	76.5
Total	385		

Test Statistics			
VAR00004			
Chi-square 60.803a			
df 1			
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 192.5.

Total			
	Observed N	Expected N	Residual
784.00	784	966.0	-182.0
1147.87	1148	966.0	182.0
Total	1932		

Test Statistics			
VAR00005			
Chi-square 68.580 ^a			
df 1			
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 966.0.

Distance: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
132.72	133	341.0	-208.0
549.00	549	341.0	208.0
Total	682		

Test Statistics			
VAR00001			
Chi-square	253.748ª		
df	1		
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 341.0.

Method
There are not enough valid cases for processing. No statistics are computed.

Warning # 3211

On at least one case, the value of the weight variable was zero, negative, or missing. Such cases are invisible to statistical procedures and graphs which need positively weighted cases, but remain on the file and are processed by non-statistical facilities such as LIST and SAVE.

Results			
	Observed N	Expected N	Residual
10.00	10	12.5	-2.5
15.01	15	12.5	2.5
Total	25		

Test Statistics			
VAR00003			
Chi-square	1.000a		
df	1		
Asymp. Sig.	.317		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.5.

Discussion				
	Observed N	Expected N	Residual	
151.68	152	246.0	-94.0	
340.00	340	246.0	94.0	
Total	492			

Total				
	Observed N	Expected N	Residual	
299.41	299	517.5	-218.5	
736.00	736	517.5	218.5	
Total	1035			

Test Statistics			
VAR00004			
Chi-square 71.837 ^a			
df 1			
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 246.0.

Test Statistics			
VAR00005			
Chi-square 184.511a			
df 1			
Asymp. Sig000			

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 517.5.

Bare assertion: PS vs. AP

Introduction			
	Observed N	Expected N	Residual
1602.00	1602	1895.0	-293.0
2188.30	2188	1895.0	293.0
Total	3790		

Method			
	Observed N	Expected N	Residual
1285.00	1285	1320.0	-35.0
1354.85	1355	1320.0	35.0
Total	2640		

Results			
	Observed N	Expected N	Residual
1346.00	1346	1450.5	-104.5
1554.72	1555	1450.5	104.5
Total	2901		

Test Statistics		
VAR00001		
Chi-square	90.606ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1895.0.

Test Statistics		
VAR00002		
Chi-square	1.856ª	
df	1	
Asymp. Sig.	.173	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1320.0.

Test Statistics		
VAR00003		
Chi-square	15.057ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1450.5.

Discussion			
	Observed N	Expected N	Residual
983.00	983	1166.5	-183.5
1350.11	1350	1166.5	183.5
Total	2333		

Total			
	Observed N	Expected N	Residual
5216.00	5216	5832.0	-616.0
6447.98	6448	5832.0	616.0
Total	11664		

Test Statistics		
VAR00004		
Chi-square	57.732ª	
df	1	
Asymp. Sig.	.000	

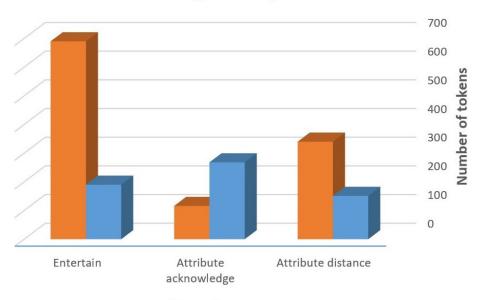
a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1166.5.

Test Statistics		
VAR00005		
Chi-square	130.129ª	
df	1	
Asymp. Sig.	.000	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 5832.0.

Appendix C

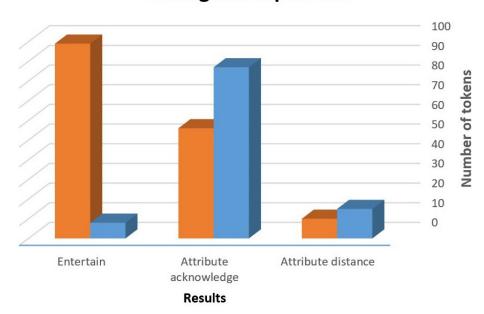
Dialogistic expansion



Discussion

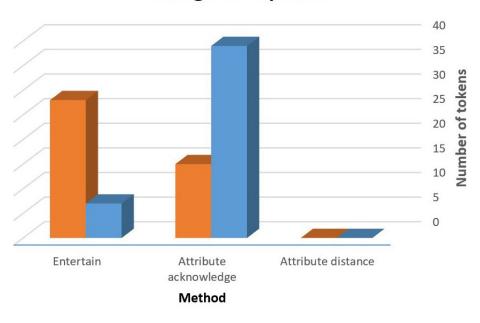
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic expansion



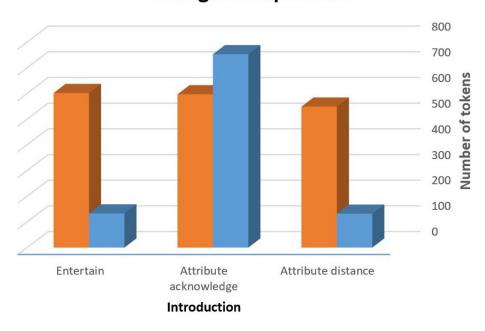
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic expansion



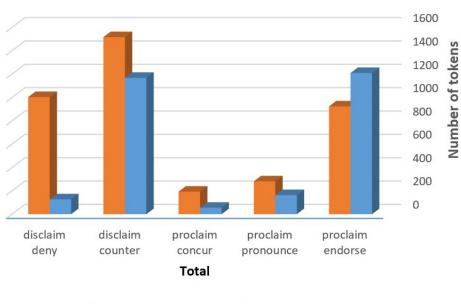
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic expansion



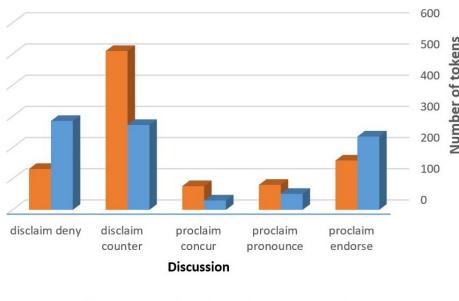
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic contraction



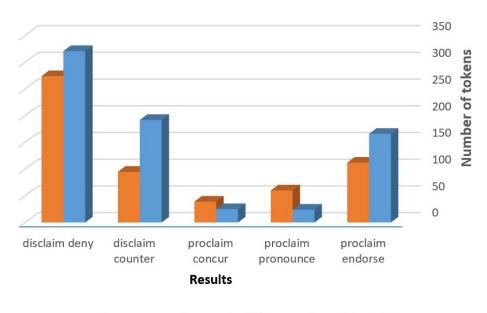
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic contraction



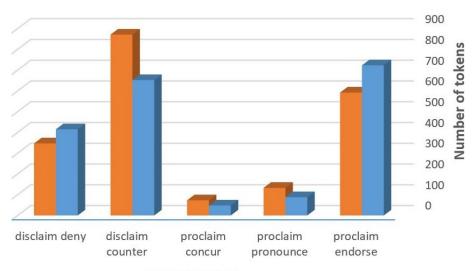
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic contraction



- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

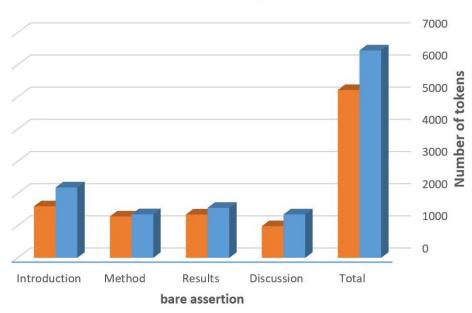
Dialogistic contraction



Introduction

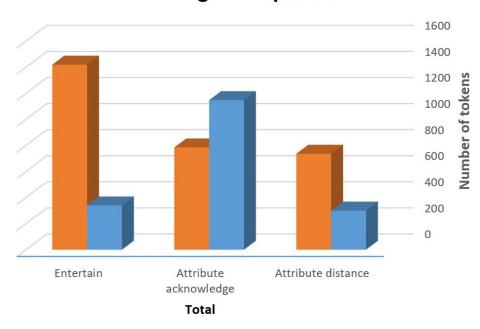
- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Monologistic



- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic expansion



- Engagement elements in different sections of the PS RAs
- Engagement elements in different sections of the AP RAs

Dialogistic contraction

