#### KURAM VE UYGULAMADA EĞİTİM BİLİMLERİ EDUCATIONAL SCIENCES: THEORY & PRACTICE

Received: February 10, 2018
Revision received: June 1, 2018
Accepted: July 16, 2018

Copyright © 2018 EDAM

www.estp.com.tr

**DOI** 10.12738/estp.2018.4.0031 • 2018 • 18(4) • 813–830

Research Article

# Young Researchers Writing in ESL and the Use of Metadiscourse: Learning the Ropes\*

Vesna Bogdanović<sup>1</sup> University of Novi Sad Ivana Mirović<sup>2</sup> *University of Novi Sad* 

#### Abstract

Entering the world of academic writing can be a troublesome experience for young researchers, especially for those writing in ESL. In addition to mastering the specific language of their disciplinary community, they also have to adopt an array of metadiscourse features which help them organize their writing and position themselves towards their content and their readers. Research on the use of metadiscourse in academic writing has indicated that ESL writers generally do not use metadiscourse elements to the same extent and in the same way as native English speakers. The paper will focus on the process of developing the awareness of metadiscourse features with young researchers and will attempt to gain an insight into how they adopt and apply these linguistic elements in their writing. It is based on a case study with three young researchers from the Faculty of Technical Sciences in Novi Sad, Serbia, whose research articles will be analyzed in relation to the correct usage of metadiscourse as well as its potential absence, using Hyland's framework. In the subsequent analysis, a questionnaire and interviews will be used to determine the degree of young authors' awareness of their use of metadiscourse and their approach to applying it in their writing. The triangulation between the corpus analysis and the questionnaire and interview data will try to address the issues of the reasons for using specific markers, the importance they attach to the use of metadiscourse in relation to the content of the research articles, and the methods of learning them, in order to unfold the correlation of beginnings of academic writing and the use of metadiscourse. It is hoped that the results of the analysis can be applied in teaching academic writing.

#### Keywords

Metadiscourse • Hyland's taxonomy • Young researchers • Academic writing • ESL

Citation: Bogdanović, V., & Mirović, I. (2018). Young researchers writing in ESL and the use of metadiscourse: Learning the ropes. Educational Sciences: Theory & Practice, 18, 813–830. http://dx.doi.org/10.12738/estp.2018.4.0031



<sup>\*</sup> An earlier version of the paper was presented at the conference "Metadiscourse Across Genres". METU Northern Cyprus Campus, Cyprus, 30 March-01 April 2017.

<sup>1</sup> Correspondence to: Vesna Bogdanović (PhD), Department of Fundamental Disciplines in Engineering, Faculty of Technical Sciences, Trg Dositeja Obradovića 6, 21000 Novi Sad, Serbia. Email: vesna241@uns.ac.rs

<sup>2</sup> Ivana Mirović (MA), Department of Fundamental Disciplines in Engineering, Faculty of Technical Sciences, Trg Dositeja Obradovića 6, 21000 Novi Sad, Serbia. Email: miriv@uns.ac.rs

As the world of modern academia becomes more international and consequently more competitive, young researchers who want to publish their results in international journals face an increasingly demanding task. This is particularly true if English, the language they write in, is not their first language. These young researchers need to possess adequate language proficiency and acquire specialized vocabulary related to their field, but they also have to achieve additional, highly advanced language competences. As part of their secondary socialisation, these novices entering academic community need to learn certain conventions and literary forms specific for academic discourse (Mauranen et al., 2010)

Research in the areas of composition, reading and text structure has indicated that metadiscourse has an important function in academic writing. It has shown that metadiscourse is highly significant in "facilitating communication, supporting a writer's position and building a relationship with an audience" (Hyland, 1998a, p. 438). It helps a writer to "guide, direct and inform" (Crismore, 1989, p. 64) the reader and their reaction to the text. This suggests that metadiscourse represents a feature of academic writing which has considerable relevance for young researchers entering academic community.

At the same time, metadiscourse may be difficult to grasp, as it is a very heterogeneous phenomenon (Hyland, 2010): metadiscourse elements can serve different functions such as organizing a text, building a persuasive argument, presenting author's position or building a reader-writer relationship. These functions can be achieved through a range of linguistic devices and cannot be reduced to a set of standardized forms. For that reason, the adequate use of metadiscourse can be particularly challenging for second language writers (Mirović & Bogdanović, 2016). In addition, metadiscourse use shows considerable variation across cultures and L2 writers cannot rely on standard practice in their L1 when writing for international publication (Mauranen, 2007). All these characteristics, which will be further discussed in the next section, make metadiscourse a significant area of research for both theoretical and practical reasons.

This paper will examine how young researchers in the fields of mathematics, electrical engineering and computing from Serbia approach this aspect of academic writing. It will attempt to determine their awareness of metadiscourse features and the approach towards applying particular metadiscourse elements in their writing. The study will also try to gain an insight into how they acquire and develop their skills in relation to specific metadiscourse elements.

# **Theoretical Framework**

In theoretical approaches, metadiscourse has progressed from statements that it can "help readers to organize, classify, interpret, evaluate and react" (Vande Kopple, 1985, p. 83) to the information (i.e. propositional material) presented in the text, to "the cover

term for self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community" (Hyland, 2005a, p. 37). Metadiscourse has been recognized as a valuable tool, both for the writer/speaker and the reader/listener.

It has therefore attracted a lot of attention in research. Studies have researched the use of metadiscourse expressions in textbooks (Bondi, 2010; Crismore, 1989; Hyland, 2000), dissertations (Akbas & Hardman, 2018; Alotaibi, 2018; Hyland, 2004; Swales, 1990), annual corporative reports (Hyland, 1998b), oral and written conference presentations (Luukka, 1994), textbook and research article introductions (Bondi, 2010), and so on. Metadiscourse expressions can be found in many languages, used in different genres, different cultures, in speech and writing, by learners and native speakers, by different gender (Alotaibi, 2018), and in different disciplines (Mauranen, 2007).

Although metadiscourse has been studied a lot in recent decades, it is still difficult to define and categorize it, as it is essentially a fuzzy category (Adel, 2006; Hyland, 2005a). Metadiscourse can be realized in text though different linguistic forms, which can range from single words, phrases or clauses to whole paragraphs. Sometimes even the use of an exclamation mark can be identified as metadiscourse and often one and the same form can function as metadiscourse in some texts but not in others (Hyland & Tse, 2004). The study of metadiscourse cannot rely on its surface forms as metadiscourse is primarily a functional category. Whether a particular item can be interpreted as metadiscourse or not depends on how it is used in its co-text (Hyland, 2005a). In addition, some researchers have indicated that metadiscourse expressions can be multifunctional (Adel, 2006; Crismore et al., 1993) and may have two or more functions at the same time. It is also an open category to which new items can be added according to the needs of the context. All this makes metadiscourse a challenging research topic, but also a difficult area to grasp and apply by non-native speakers.

Contrastive studies have indicated that the use of metadiscourse varies in different languages. In comparison to English, metadiscourse is used less in German (Clyne, 1987), Finnish (Mauranen, 1993), Turkish (Akbas & Hardman, 2017, 2018; Hatipoğlu & Algı, 2018), and Slavic languages such as Polish (Duszak, 1994), Slovene (Pisanski Peterlin, 2005) and Serbian (Blagojević, 2005; Bogdanović & Mirović, 2013). This fact has significance for non-native English writers, particularly researchers who wish to participate in a wider academic community. Given the interactive character of academic writing, the correct use of metadiscourse becomes crucial for credible representation of one's work and for establishing relations with the readers. In fact, metadiscourse can be described as a "central pragmatic feature" (Hyland, 1998a, p. 453) of academic writing which enables writers to organize and present their arguments and findings in a way which is accepted in their disciplinary communities.

However, studies focusing on the use of metadiscourse elements by Serbian researchers writing in English (Blagojević, 2005; Bogdanović & Mirović, 2013) found that these authors do not use metadiscourse sufficiently, which can potentially affect their chances of publication. The results of a recent study by Mirović and Bogdanović (2016) are more reassuring in that they suggest that same authors were able to vary and adapt their use of metadiscourse depending on whether they wrote in Serbian or in English. Conversely, their follow-up interviews revealed that these authors were not consciously aware of how they use metadiscourse in their writing and sometimes actually had some wrong assumptions regarding the use of metadiscourse. The pervasiveness of metadiscourse in academic writing and its critical role in successful academic communication calls for further investigation into the use of metadiscourse by L2 writers.

## Methodology

This paper focuses on three L2 writers' perceptions of the role and importance of metadiscourse in their writing and considers the process of acquiring the skills of metadiscourse use in ESL. Using the triangulation between a questionnaire and the interviews with three young researchers which were partly based on the analysis of these researchers' published research articles, the study seeks to examine how metadiscourse elements are learnt and used by successful young researchers.

The paper addresses two research questions:

- i) To what extent are young researchers aware of the need to use metadiscourse in their writing?
- ii) How did these researchers learn to perceive and use particular metadiscourse expressions?

### **Metadiscourse Taxonomy**

The paper is established on Hyland's taxonomy which divides metadiscourse into interactive and interactional categories (Hyland, 2005a; 2010). This classification is based on functional approach where the emphasis is on the manner the writer refers to the text, to themselves and to the reader. In this taxonomy, metadiscourse is related only to the context in which it occurs and the interaction between elements is always present. The model is presented in the following manner:

**Interactive expressions** help to guide the reader through the text and include:

- Transitions (express relations between main clauses): e.g. in addition, but, thus, and;
- Frame markers (refer to discourse acts, sequences or stages): e.g. *finally, to conclude, my purpose is*;

- Endophoric markers (refer to information in other parts of the text): e.g. *noted* above, see Fig., in section 2;
- Evidentials (refer to information from other texts): e.g. *according to X, Y 1990, Z states*:
- Code glosses (elaborate propositional meanings): e.g. *namely, e.g., such as, in other words*

**Interactional expressions** involve the reader in the text, i.e. allow writers to conduct interaction by intruding and commenting on their message. These include:

- Hedges (withhold commitment and open dialogue): e.g. *might, perhaps, possible, about*;
- Boosters (emphasize certainty or close dialogue): e.g. in fact, definitely, it is clear that;
- Attitude markers (express writer's attitude to proposition): e.g. *unfortunately, I agree, surprisingly*;
- Engagement markers (explicitly build relationship with reader): e.g. *consider, note that, you can see that;*
- Self mentions (explicitly refer to author(s)): e.g. *I, we, my, our*.

# **Participants**

The participants in the study were three young researchers from the Faculty of Technical Sciences, University of Novi Sad, Serbia. The three researchers, who were known to the authors of this paper since they work at the same University, were asked to participate in the study on the basis of several criteria. They were selected as representatives of their colleagues in the fields of mathematics, electrical engineering and computing, the fields which are successfully researched at the University of Novi Sad. Although still considered young, they are not academic novices and have had significant experience in writing and publishing in English. In addition, the authors of this paper knew, through previous contacts with these researchers, that they paid considerable attention to improving their English language skills and attaining high quality in their writing.

Detailed information about the participants was collected in the first part of the questionnaire. Two of them started learning English at the age of eleven, while the third one began at the age of four. They learned English at school and attended English courses at the university; however, neither of them had any instruction in English for

academic purposes or, more precisely, in the use of metadiscourse. Based on years of learning English, as well as the analysis of their research papers, it can be stated that they have an excellent knowledge of the English language, both general and professional. They have been working at the University for the period of 8 to 15 years, and during that time each of these researchers has written (authored or co-authored) more than 20 research papers in English. They provided three of their published papers (published in international journals) which were analysed by the interviewers for the discourse-based interview in order to be able "to compare participants' stated perspectives and beliefs about writing with actual discursive strategies evident in the text" (Olinger, 2014)

#### **Data Collection Materials and Procedures**

The data collected in this study came from a questionnaire and semi-structured interviews which the two authors conducted with the participants.

The questionnaire consisted of three parts. The purpose of the first part was to collect general information about the participants, and the information collected in this way has been presented in the previous section. This data demonstrates their writing competence and presence in the academic community.

The second part of the questionnaire was concerned with the participants' perception of the role of metadiscourse. After a brief introduction on the meaning of this term, the participants were asked to provide answers to several questions about the use of metadiscourse in their writing. The questions dealt with the awareness of metadiscourse elements and their deliberate use, the amount of attention these elements received in participants' writing, and the importance the participants attached to their use. They were also asked about specific forms of metadiscourse, which they might incorporate regularly in their writing, as well as whether they paid additional attention to metadiscourse when they re-read and improved their papers. Most of the questions were simple factual questions.

In the third part of the questionnaire, they were presented with Hyland's (2005a) ten metadiscourse categories accompanied with short description of each and typical examples. The examples were presented for the clear and explicit understanding of the types of markers discussed. Participants were asked to grade, on a so-called basic Likert scale (from one to five) what they believed to be the frequency of their usage of individual metadiscourse categories. The additional purpose of this section was to further familiarize the participants with different types of metadiscourse and exploit this as a starting point for the subsequent interviews. During the discourse-based interviews, to be certain what the interviewers asked, they would simply look into the examples and categories prior to answering the question.

After the data from the questionnaires were collected, each of the participants was asked for an interview with the two authors of this paper. The interviews were in-depth and semi-structured, since these allow the interviewers to express their own experiences and their opinion (Cohen, Manion, & Morrison, 2007; Petrić & Hardwood, 2013). All the interview segments began with the questions from the questionnaire, moving along as a response to the participant's answers and opinions. Hence, on the one hand, the similarities between answers given by different participants could be easily underlined, while at the same time, more detailed descriptions could be provided for each individual answer. The question which was regularly asked concerned the participants' reasons for using a particular type of metadiscourse as the interviewers wanted to establish whether the interviewees were aware of the role that the particular type of metadiscourse had within the research article. Other frequently asked questions were: "Why do you use this type of expression often? /Why don't you use it often?", "How important is X (a particular metadiscourse category) for good writing?", "Do you think about the potential readers when you write?", or "Is there a place for you/ your opinion in the research article?".

The participants were also regularly asked how they had learned to use a particular metadiscourse category or expression, and what strategies they employed to remember them or use them correctly. Finally, they were asked what kind of help they thought would improve their L2 writing skills (regarding the use of metadiscourse elements) and what sort of advice they would give to their younger colleagues.

In addition, the interviews were structured to include elements of discourse-based interviews (Odell, Goswami, & Herrington, 1983). This meant that the research papers written by the participants were analyzed prior to the interviews with the aim of finding instances of metadiscourse elements and highlighting them. The findings of this analysis are not presented in this paper, as the current investigation does not focus on the participants' actual use of metadiscourse in research papers. Instead, the participants' research articles were analysed so that the actual examples of metadiscourse usage could be employed by the interviewers in order to form the basis for the discourse-based interviews. In this way, they helped them answer the research questions related to the awareness and perceptions in using metadiscourse as young researchers. During the interviews, the participants were asked questions like: "Why did you use these expressions here?", "Did you have any alternative for this expression used here or was it your first and only choice?", and the like. The participants responded to features they actually used in papers and they had to recollect the reasons for using them. These questions provided the knowledge of how considerate writers actually were in relation to their possible readership, as well as the intentions, direct or indirect, they had while writing. Discourse-based interviews are beneficial since they allow the writer to interpret meanings, reconstruct motivation

and evaluate rhetorical effectiveness (Hyland, 2005b, p. 182) of their own pieces of academic writing. These questions were then followed by additional questions, prepared in advance, about the selected instances of metadiscourse (e.g. "I noticed you used the same expression several times in a row. Is it the only expression used in your field of research or is it only your personal preference?").

The interviews were conducted in Serbian to help the interviewees express themselves as accurately as possible. All interviews were audio-recorded, transcribed and subsequently translated into English.

#### Results and Discussion

The corpus obtained through questionnaires and interviews was analysed focusing on the main interests of this study:

- i) Researchers' perception of metadiscourse. The authors wanted to investigate whether these researchers, who came from Serbian language background (the language that uses metadiscourse less than English), were aware of the role and importance of adequate metadiscourse use in English academic writing. Additionally, the research aimed at determining what metadiscourse categories were considered relevant (and why) by the researchers in the area of mathematics and engineering.
- ii) Acquiring the knowledge of metadiscourse use. The authors were interested in how these researchers, who have published successfully in English, learnt to use metadiscourse, particularly in view of the fact that this area is usually not explicitly taught in ESL classes.

The information from the questionnaire confirmed that the participants received no instruction in the area of metadiscourse use (or academic writing in general); however, two of them (who are longer in the academic world) stated that they used metadiscourse elements consciously, paying attention to the expressions they used and making corrections and alterations in the subsequent versions of the paper. The third participant, an engineer, reported using a smaller range of metadiscourse elements, not doing that with full awareness and usually not correcting these expressions later in the process. All three stated that they had expressions and phrases they used regularly. Answering the question which determined their views on the importance of metadiscourse on Likert scale, they described it as important, but not crucial element in their writing (3.67/5).

# **Perception of Metadiscourse Categories**

More detailed insight concerning the participants' perception of different metadiscourse categories was gained during the interviews. Regarding their writing, all participants reported that they used interactive categories (4.3/5) more than interactional ones (2.46/5). This can be related to their disciplines (mathematics and engineering). Further enquiry into interactive metadiscourse demonstrated that the participants placed a lot of emphasis on evidentials and endophoric markers. They seem to be sure about the importance of evidentials (5/5) in positioning authors in their discourse community:

(1) I have to show that I'm familiar with what others have done and that my works represent a significant contribution to the field. (Participant B)

Participant B also correctly noticed that he would mostly use evidentials in introduction and literary review sections. According to Participant A, evidentials "have to be there", and, as she explains:

(2) We always try to put a lot of them because we always refer to somebody else's results so we don't want to be accused of that [plagiarism]. (Participant A)

Similarly, the use of endophoric markers is regarded as standard practice (4.3/5) adopted early in learning to write. This was aided by the fact that these expressions could be easily translated from Serbian and do not need to be varied to a greater extent (Participant A). Participant B places their use in the context of their discipline:

(3) We [in engineering] need that a lot. (Participant B)

The analysis of participants' papers revealed certain variations in the forms of evidentials and endophoric markers (whether they write shorter or longer versions of these expressions, integral or non-integral ways of citation); hence, we asked them to comment on this. Participant C provided some interesting insights. Although he finds the use of these two categories necessary in supporting his argumentation by drawing on the information presented elsewhere in the text (in the case of endophoric markers, which he says he uses a lot) and for establishing his position as a knowledgeable participant in the discourse community (in the case of evidentials, which he considers "obligatory"), he usually keeps them as short as possible and would frequently put them in parenthesis. He explains:

(4) They [endophoric markers] interrupt the sentence. (...) I prefer to make evidentials as short as possible so that they do not interfere with the flow of the text. (Participant C)

This is an interesting example of a competent writer who adapts the use of metadiscourse elements to suit his personal writing style.

Participant B provided a different explanation for choosing between longer or shorter version of a metadiscourse expression, particularly endophoric markers and evidentials. Talking of evidentials, he says:

(5) Sometimes I pay attention to formatting. And then, if there is a graph going to the next page and makes troubles, then I begin to leave something out, er, and then in brackets I only put: Figure X. (...) And vice versa. If I have a hole in the text and I have to fill it in with something, I begin to expand these sentences and then it will be: In figure X, this and that is presented. (Participant B)

As for evidentials which he uses in introductions, he says that he uses non-integral way of citation when he feels that the introduction of a particular article is already too long. This again speaks of a writer who understands the role of metadiscourse use and adapts it to his own needs.

Transitions are also considered to be used very frequently (3.66/5), although Participant A admitted that she relies on a few expressions that she knows well. Participant B, on the other hand, uses a wide range of transitions and tries to vary them so that "the sentences do not look alike". Participants B and C find the use of transitions very important in their writing and search for the right expression which would correctly link the ideas (one can compare their opinion to the use of transitions in the pieces of academic writing by Chinese writers in the research by Gardner and Han (2018)).

The function of frame markers seems to be clear to the participants of this study. They mention that they "help the reader" (Participant B). Nevertheless, one of the explanations for their usage was the following:

(6) I saw that everybody else is writing like that. (Participant A)

The use of code glosses seems to vary among the participants. Participant A, a mathematician, uses them a lot. She describes the role of these expressions as necessary to give a precise and exact meaning of the expression or formula given. This is just an example from her writing:

(7) For semirings of the first and third classes, i.e., for semirings with idempotent pseudo-addition, the total order is induced by the following (Participant A's paper 1)

This is typical for her discipline. Similarly, Participant C sees the role of code glosses in supplying additional information to the reader and reports frequent uses of expressions like e.g. or i.e., which he puts in parentheses. Participant B, on the other hand, does not regard code glosses as an aid in conveying his ideas clearly. He seems to regard them as a sign of imprecise writing, which impairs good comprehension. Even though the interviewers suggested the potential usefulness of incorporating code glosses in writing, he kept his position that sentences should be clear and understandable without additional explanation. For that reason, he frequently rewrites sentences or even whole paragraphs if he (or his colleagues) finds them unclear, instead of incorporating code glosses. It seems that he does that with a reader in mind:

(8) I try to write it to be comprehensive. ... If it is not comprehensive I'm afraid that the person reading will not understand it. This first impression is important. If someone does not understand what it is about, what is the possibility they will reread it and read it again? It's not likely. (Participant B)

Overall, the participants seem to be familiar with interactive metadiscourse and its appropriate use in a research article. In addition, they exhibited some disciplinary and individual preferences.

Interactional categories of metadiscourse are used to a lesser extent, which again may be interpreted as a consequence of the participants' disciplines and is in accordance with findings of other researchers (Hyland, 1998a; Hyland & Tse, 2004).

All three participants agree that hedging does not have a prominent place in their writing. In explanation for this, Participant A notices that their papers are very exact and focused on particular, clearly defined mathematical problems; hence, if the results cannot be interpreted with absolute precision, the whole investigation would be pointless. Similar opinion is expressed by informants in the study on metadiscourse in pure mathematics by McGrath and Kuteeva (2012).

Participant C reports that he sometimes felt the need to use some hedging devices, but decided to avoid them as "it is not recommended". When asked to comment on hedging expression "to the best of our knowledge" (Participant C's paper 2) in the introduction of one of his papers, he interpreted hedging of this sort as related to projecting a certain level of humility and not overstating his claim. He stated that he would not use that when interpreting a research. Participant B, also an engineer, is confident in his attitude that hedging should be avoided as it "diminishes our results". He explains:

(9) If that something is the result of my work, then it is not good to say it might, it could be because then it means that I'm unsure in what I was doing. (Participant B)

Similarly, the participants found no place for boosters in their research articles and little room for attitude markers. Participant A expresses her opinion that, although she sometimes finds these expressions in other people's writing (also confirmed by McGrath & Kuteeva, 2012), she does not think this is appropriate for research articles. Participant B was unsure whether boosters and attitude markers, which he uses in correspondence with reviewers to stress the contribution his research is making to the field (e.g. "significant novelty", "important contribution"), might sometimes be useful in the research articles themselves.

(10) If I needed these expressions in writing to the reviewers then this might suggest that there was some need for this in the article. I should have stresses that. (Participant B)

The use of engagement markers is not prominent with the two engineers (Participants B and C); nevertheless, Participant A (a mathematician) thinks that she uses them a lot.

However, she was not sure whether this was used to establish actual contact with the reader or it represented merely a convention of mathematical discourse. These are two examples (of many) of engagement markers identified in her papers:

- (11) Consider the following two interval-valued functions with border functions of the same monotonicity (Participant A's paper 1)
- (12) Note that the notion of a simple function coincides with the notion of an elementary function. (Participant A's paper 3)

Similarly, there are a number of examples of the use of pronoun 'we', such as:

- (13) If we consider a semiring from the second class, the pseudo-operations are given by the generator g and the  $\oplus$ -measure  $\mu$  has the form (...). (Participant A's paper 3)
- (14) Let us consider the g-semiring on the interval  $[0,\infty]$  with the generating function g(x). (Participant A's paper 2)

However, the use of the pronoun is rather specific for the rhetoric of mathematical argumentation and not used in the same way as self mentions in Hyland's classification. Other than conventional expressions like this, Participant A feels that she should not use personal pronouns or possessive adjectives in her writing. Participant B echoes this attitude stating that he would "avoid it [self mentions] whenever possible". Participant C agrees with them, adding that he might use self mentions in the form of possessive adjectives (e.g., "our system"). The use of first person singular is perceived as unacceptable by the participants. All of them explain this by the dominant opinion in their discourse communities which was imposed on them through suggestions by reviewers, IEEE guidelines or examples from the papers they had read. The participants stress that they are often instructed to be impersonal and for that reason prefer to use passive voice instead of self mentions.

# Learning about Metadiscourse

One of the questions in the questionnaire enquired how the participants had learnt to use metadiscourse; the same question was frequently asked during the interviews in relation to particular metadiscourse categories. The summaries of each participant's answers are presented here.

The participant who pays the least attention to applying metadiscourse, and acquiring metadiscourse expressions, is Participant A. This fact, once again, may be interpreted in relation to her field, mathematics, where discourse is constructed through "standardised code" (Hyland, 2005c, p. 189). For example, talking about transitions, she says that she relies only on a set of known expressions. Since the paper reviewers never commented on the transition words, she does not feel the need to learn more.

Throughout the interview, participant A indicated that most of her knowledge was based on the papers she had read and that she tried to follow the manner in which other authors write. Her very simple explanation is the following:

(15) I saw that everybody else writes like that. (Participant A)

Her suggestion on how to help young researchers learn metadiscourse expressions is to provide examples in sentences, not just a list of words, pointing out that examples are clearer and more easily remembered.

Participant B, on the other hand, is very careful about the phrases and forms he uses, and, while proofreading his papers, he tries to improve his metadiscourse as well. He is self-taught in his use of metadiscourse and, like participant A, he also learnt from other papers in the field (electrical engineering). He says: "You read and read..." In addition, he considers internet a great source of information for finding advice on how to write. At the same time, he seems to appreciate social strategies as well and acknowledges the role of his colleagues or co-authors in indicating parts of the text that "don't work".

As participant B expressed the opinion that metadiscourse has an important role in facilitating communication about one's research, we were interested in his position on including instruction on metadiscourse in a course of academic writing as a form of help for young researchers. He was in favour of this idea, though felt that this would have to be closely related to these researchers' actual writing in order to be successful.

Participant C, who started learning English at the age of four, stresses the role of his Master thesis supervisor in developing his academic skills, including the skill of using metadiscourse in his writing. Although he did not receive any language instruction, this participant feels that his supervisor's emphasis on the organization of ideas within a research article and on the logic of building one's arguments directed his attention to the use of metadiscourse elements. Talking about the use of endophoric markers which he finds prominent in his writing, he describes how he learnt about them very early in his career:

(16) When my supervisor was talking about the organization of a research article, and gave me some examples, I noticed this paragraph at the end of Introduction. I have adopted this ever since. (Participant C)

He also feels that the fact that he had to read a large number of research articles during his doctoral studies (he mentions reading 100 research papers in a year) had the consequence that he adopted metadiscourse features in his writing. "Some of this happens subconsciously", he adds. However, he strongly feels that formal instruction on metadiscourse would be beneficial for young researchers. He himself has watched tutorials on the internet to help him improve his writing. In addition, he relies on the

instructions for authors provided by the journals, although they do not always cover the use of metadiscourse.

#### Conclusion

The analysis of the data obtained in this study reveals that the participants, successful researchers from the University of Novi Sad, are very much aware of metadiscourse in research articles, although the term itself was not familiar to them prior to this study. They consider metadiscourse useful in their writing and relate its use to the accepted practice in their discourse communities. Discussing particular metadiscourse categories, the participants repeatedly said that they "have to be used", or "are obligatory". The reasons for this were found in being more successful in the communication of research results.

The explanations these participants provided for the use of particular metadiscourse categories were similar to those found elsewhere in the literature (Crismore, 1989; Mirović & Bogdanović, 2016), frequently echoing Hyland's (2005a) explanations. For example, they express the position that frame markers, "help the reader" and are aware of how referring to the works of others in the literature review section of their paper positions them within a particular discourse community. In general, the participants reported more use of interactive than interactional elements of metadiscourse in their writing, which can also be interpreted in view of their research disciplines (Hyland & Tse, 2004). Furthermore, the participants' clarification of the use of particular metadiscourse elements sometimes reflects their awareness of the specific characteristics of their research fields as well. Conversely, their use of particular forms of metadiscourse also showed individual preferences, which we interpreted to be the result of their advanced language proficiency and confidence in their L2 language skills.

When asked how they learnt certain metadiscourse features that they use in their writing, the participants invariably mentioned other research articles in their field, which provided a model to be followed, particularly in the early phases. Internet, writing tutorials and guidelines for authors provided by some journals are also considered useful. Therefore, as suggested by Akbas and Hardman (2018) and Molino (2018), integrating authentic materials and activities in line with the needs of the learners would boost up the awareness of metadiscourse. Social strategies also have a role (particularly in co-authored papers), and sometimes reviewers are mentioned as people who provide useful feedback. Reviewers are also seen as the most important readers of the paper. As a conclusion, all participants agree that instruction in metadiscourse can be beneficial for improving their writing skills.

The pedagogical implications of this study with three researchers from Serbia are related to the instruction into the use of metadiscourse. The results in this paper suggest that these researchers adopted metadiscourse expressions both consciously and

subconsciously. The fact that they frequently think about metadiscourse expressions, seek advice on the internet and react to the recommendations provided by reviewers or journal guidelines suggests that teaching in this area has its place within the course of academic writing. For the young researchers from Serbian language background who wish to publish in international journals, the instruction in the appropriate use of metadiscourse would provide valuable aid in gaining acceptance for their writing.

#### References

- Adel, A. (2006). Metadiscourse in L1 and L2 English. Amsterdam, NL: John Benjamins.
- Akbas, E., & Hardman, J. (2017). An exploratory study on authorial (in)visibility across postgraduate academic writing: Dilemma of developing a personal and/or impersonal authorial self. In C. Hatipoglu, E. Akbas & Y. Bayyurt (Eds.), Metadiscourse in written genres: Uncovering textual and interactional aspects of texts (pp. 139–174). Bern, Switzerland: Peter Lang. https://doi.org/10.3726/b11093
- Akbas, E., & Hardman, J. (2018). Strengthening or weakening claims in academic knowledge construction: A comparative study of hedges and boosters in postgraduate academic writing. *Educational Sciences: Theory & Practice*, 18, 831–859. http://dx.doi.org/10.12738/estp.2018.4.0260
- Alotaibi, H. (2018). Metadiscourse in dissertation acknowledgments: Exploration of gender differences in EFL texts. *Educational Sciences: Theory & Practice*, 18, 899–916. http://dx.doi. org/10.12738/estp.2018.4.0247
- Blagojević, S. (2005). What should a non-native speaker of English be aware of when writing in English for academic purposes? *Romanian Journal of English Studies*, 2, 11–20.
- Bogdanović, V., & Mirović, I. (2013). Upotreba metadiskursa u saobraćajnom inženjerstvu: Analiza naučnih radova pisanih na engleskom kao maternjem i engleskom kao stranom jeziku [Metadiscourse in traffic engineering: An analysis of research articles written in English as a first language and in English as a second language]. In G. Dimković-Telebaković (Ed.), *Strani jezik u saobraćajnoj struci i nauci* (pp. 73–92). Beograd: Saobraćajni fakultet.
- Bondi, M. (2010). Metadiscursive practices in introductions: Phraseology and Semantic sequences across genres. *Nordic Journal of English Studies*, 9(2), 99–123.
- Clyne, M. (1987). Discourse structures and discourse expectations: Implication for Anglo-German academic communication in English. In L. E. Smith (Ed.), *Discourse across cultures* (pp. 73– 83). Hawaii, HI: East-West Centre, Institute of Culture and Communication.
- Cohen, L., Manion, L., & Morrison, K. R. (2007). Research methods in education (6th ed.). London, UK: Routledge Falmer.
- Crismore, A. (1989). Talking with readers: Metadiscourse as rhetorical act. New York, NY: Peter Lang.
- Crismore, A., Markkanen, R., & Steffensen, M. (1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written Communication*, 10(1), 39–71.
- Duszak, A. (1994). Academic discourse and intellectual styles. *Journal of Pragmatics*, 21(3), 291–313.
- Gardner, S., & Han, C. (2018). Transitions of contrast in Chinese and English university student writing. *Educational Sciences: Theory & Practice, 18*, 861–882. http://dx.doi.org/10.12738/estp.2018.4.0067
- Hatipoglu, C., & Algi, S. (2018). Catch a tiger by the toe: Modal hedges in EFL argumentative paragraphs. *Educational Sciences: Theory & Practice, 18,* 957–982. http://dx.doi.org/10.12738/estp.2018.4.0373
- Hyland, K. (1998a). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of Pragmatics*, 30, 437–455.
- Hyland, K. (1998b). Exploring corporate rhetoric: Metadiscourse in the CEO's letter. *International Journal of Business Communication*, 35(2), 224–244.

- Hyland, K. (2000). Disciplinary discourses: Social interactions in academic writing. London, UK: Longman.
- Hyland, K. (2004). Genre and second language writing. Ann Arbor, MI: University of Michigan Press.
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, 25(2), 156–177.
- Hyland, K. (2005a). Metadiscourse: Exploring interaction in writing. London, UK: Continuum.
- Hyland, K. (2005b). Digging up texts and transcripts: Confessions of a discourse analyst. In T. Silva & P. Matsuda (Eds.), Second language writing: Perspectives on the process of knowledge construction (pp. 177–189). New Jersey, NJ: Lawrence Erlbaum.
- Hyland, K. (2005c). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, 7(2), 173–192.
- Hyland, K. (2010). Metadiscourse: Mapping interactions in academic writing. *Nordic Journal of English Studies*, 9(2), 125–143.
- Luukka, M. R. (1994). Metadiscourse in academic texts. In B. L. Gunnarsson, P. Linell, & B. Nordberg (Eds.), Text and talk in professional contexts. Selected Papers from the International Conference "Discourse and the Professions," (pp. 77–88). Uppsala: ASLA, The Swedish Association of Applied Linguistics.
- Mauranen, A. (1993). Cultural differences in academic discourse problems of a linguistic and cultural minority. *AFinLAn Vuosikirja*, 23(51), 157–174.
- Mauranen, A. (2007). Discourse reflexivity and international speakers how is it used in English as a Lingua Franca? *Jezik in Slovstvo*, 52(3–4), 1–19.
- Mauranen, A., Hynninen, N., & Ranta, E. (2010). English as an academic lingua franca: The ELFA project. English for Specific Purposes, 29, 183–190.
- McGrath, L., & Kuteeva, M. (2012). Stance and engagement in pure mathematics research articles: Linking discourse features to disciplinary practices. *English for Specific Purposes*, 31(3), 161–173.
- Mirović, I., & Bogdanović, V. (2016). Use of metadiscourse in research articles written in L1 and L2 by the same authors. In S. Plane, C. Bazerman, F. Rondelli, C. Donahue, A. N. Applebee, C. Bore ... D. Russell (Eds.), *Recherches en écritures: Regards pluriels. Recherches Textuelles, No. 13* (pp. 435–456). Metz: Université de Lorraine.
- Molino, A. (2018). "What I'm speaking is almost English...": A corpus-based study of metadiscourse in English-medium lectures at an Italian University. *Educational Sciences: Theory & Practice*, 18, 935–956. http://dx.doi.org/10.12738/estp.2018.4.0330
- Odell, L., Goswami, D., & Harrington, A. (1983). The discourse-based interview: A procedure for exploring the tacit knowledge of writers in non-academic settings. In P. Mosenthal, L. Tamor, & S. A. Walmsley (Eds.), Research on writing: Principles and methods (pp. 221–236). New York, NY: Longman.
- Olinger, A. R. (2014). On the instability of disciplinary style: Common and conflicting metaphors and practices in text, talk, and gesture. *Research in the Teaching of English*, 48(4), 453–478.
- Petrić, B., & Harwood, N. (2013). Task requirements, task representation, and self-reported citation functions: An exploratory study of a successful L2 student's writing. *Journal of English for Academic Purposes*, 12, 110–124.
- Peterlin, A. P. (2005). Text-organising metatext in research articles: An English-Slovene contrastive analysis. English for Specific Purposes, 25, 307–319.
- Swales, J. (1990). Genre analysis: English in academic and research settings. Cambridge, UK: Cambridge University Press.
- Vande Kopple, W. J. (1985). Some exploratory discourse on metadiscourse. College Composition and Communication, 36(1), 82–93.

Appendix-Questionnaire
Part 1: General information:
1. How long have you been studying English? years
2. Have you ever attended a course in Academic English?
yes no
3. When did you begin working at the Faculty? In
4. How many scientific papers in English have you published?
a) Less than 10
b) 10 – 20
c) More than 20
Part 2: Information related to metadiscourse:
1. Have you had any training related to the use of metadiscourse when writing a research paper?
yes no
2. Do you premeditate the use of metadiscourse while writing research papers?
yes no
3. How much attention do you attribute to metadiscourse when writing research papers?
(1-none attention, 2-rare attention, 3-some attention, 4-quite an attention, 5-a lot of attention)
1 2 3 4 5
4. Are there any expressions, any examples of metadiscourse, that you regularly use while writing
a research paper?
yes no
If yes, list them:
5. How did you learn to use metadiscourse expressions present in your papers?
6. Do you subsequently add metadiscourse expressions in the draft versions of the paper?
yes sometimes no
If your answer is positive, write why you do it and which expressions you add most often.
7. What is the significance you attribute to the use of metadiscourse in writing your research papers?
(from 1 to 5; 1 being the smallest and 5 the highest value)
Part 3: Detailed metadiscourse analysis:
How often do you use the following expressions when writing research papers:
1 – I don't use them at all,
2 – I rarely use them,

4 - I use them quite often, 5 – I always use them

3 – I occasionally use them,

a)	Expressions that express semantic relation between main clauses and main sections in the paper	er
	(but, thus, in addition, consequently)	

1 2 3 4 1	5

b) Expressions that refer to paper organization, express sequence, label text stages, announce discourse goals, or indicate topic shift (finally, to conclude, the purpose is, first, next)

1	2	3	4	5

c) Expressions that refer to information in other parts of the paper (noted above, see Fig., in section 2)

1	2	3	4	5

d) Expressions that refer to the source of information from other texts/papers/books (according to X, Z 1990, Y states, as shown in [1])

1	2	3	4	5

e) Expressions that restate and explain information for better understanding (namely, e.g., such as, in other words)

1	2	3	4	5

f) Expressions that withhold your full commitment to the information (might, perhaps, possible, about, approximately, to some extent)

1	2	3	4	5

g) Expressions that emphasise your certainty in the information stated (in fact, definitely, it is clear that)

1	2	3	4	5

h) Expressions that explicitly express your attitude towards an information in the paper (unfortunately, I agree, surprisingly, promising idea, important contribution)

1	2	3	4	5

i) Expressions that build relationship with the reader (consider, note that, you can see that)

1	2	3	4	5

i) Expressions that explicitly refer to you as the author (I, we, my, our)