Individual Differences and Micro-argumentative Writing Skills in EFL: An Exploratory Study at a Hungarian University

Gyula Tankó and Kata Csizér

Abstract An extensive body of literature has been generated on the written argumentation produced by EFL students; however, research studies have not merged analytical perspectives from rhetorical, informal reasoning, and pragma-dialectic perspectives to analyze students' argumentative writing. Furthermore, the relationship between individual differences (ID) variables and argumentation has received limited attention. In this study, we aimed to investigate high-achieving students' ID variables profile (Dörnyei, The psychology of the language learner: Individual differences in second language acquisition. Lawrence Erlbaum, Mahwah, 2005; Dörnyei, The psychology of second language acquisition. Oxford University Press, Oxford, 2009; Schmitt, An introduction to applied linguistics. Arnold Publishers, London, 2002) and written argumentation skills. The study involved the top 30% of 140 first-year English language majors from Budapest. A standardized questionnaire was constructed to collect data on university students' motivated learning behavior, language-learning selves, anxiety, and self-efficacy as well as on their learning styles and self-regulation. Timed argumentative essays written by students were used to analyze written argumentation skills. The analytical tools employed in the analysis of argumentation skills were the taxonomy of argumentative theses (Tankó and Tamási, A comprehensive taxonomy of argumentative thesis statements: A preliminary pilot study. Working papers in language pedagogy, 2, 1–17. Available online at: http://langped.elte.hu/WoPaLParticles/W2TankoTamasi.pdf, 2008), the justificatory argument model (Toulmin, The uses of argument. Cambridge University Press, Cambridge, 2003; Toulmin et al., An introduction to reasoning, 2nd ed. Collier Macmillan, New York, 1984), and the typology of complex argumentation (Van Eemeren et al., Argumentation analysis, evaluation, presentation. Lawrence Erlbaum Associates, Mahwah, 2002). The ID profile of high achievers revealed that they are highly motivated learners with a strong ideal L2 self. Although this marked ID profile is reflected in their written argumentation skills, they also have weaknesses

G. Tankó (✉) · K. Csizér
Department of English Applied Linguistics, Eötvös Loránd University, Budapest, Hungary
e-mail: tanko.gyula@btk.elte.hu

that need to be addressed in academic skills courses in order to further improve the quality of their argumentation. (This research was supported by the Hungarian Scientific Research Fund (OTKA K83243).)

1 Introduction

Argumentation is a skill that any critical thinker, speaker, or writer needs in order to function effectively in society in general and in an academic context in particular. It is therefore a skill that is widely taught at universities for students in all fields of science. Whereas argumentation challenges even native speaker students, it is a skill that non-native speakers regularly struggle with in the course of their studies.

Researchers have made extensive efforts to address the needs of these students. As a result, a substantial body of literature has been generated on the written argumentation produced by EFL students; however, research studies have not merged rhetorical, informal reasoning, and pragma-dialectic analytical perspectives to analyze students' argumentative writing. Furthermore, the relationship between individual differences (ID) variables and argumentation has received limited attention in the field. Describing the ID profile of high achieving students' together with the characteristic features of their argumentation skills can help us understand what makes these students successful and can shed light on the nature of their success in composing argumentative essays. Understanding high achieving students' ID profiles as well as their strengths and weaknesses in written argumentation should allow teachers to assist less successful academic writers to become high achievers and to further improve the argumentation skills of high achievers when deficiencies are found.

In this study, we therefore aimed to investigate high-achieving students' ID variables profile (Dörnyei 2005, 2009; Schmitt 2002) and written argumentation skills. The study involved the top 30% of 140 first-year English language majors attending a large university in Budapest. A standardized questionnaire was constructed to collect data on university students' motivated learning behavior, language-learning selves, anxiety, and self-efficacy as well as on their learning styles and self-regulation. Timed argumentative essays written by students were used to analyze written argumentation skills. The analytical tools employed in the analysis of arguments were the taxonomy of argumentative theses (Tankó and Tamási 2008), the justificatory argument model (Toulmin 2003; Toulmin et al. 1984), and the typology of complex argumentation (Van Eemeren et al. 2002).

Following a review of the relevant ID and argumentation literature, in this paper we present the research questions and methods of the study, describe and discuss the ID profiles together with the strengths and weaknesses identified in the argumentation writing skills of high achieving students, and conclude with some suggestions for academic writing classes.

2   Review of the Literature

ID and written argumentation research have generated a considerable body of literature; however, in the following two subsections we present an overview of only those contributions that directly informed this research study.

2.1   ID Variables

The influence of individual difference variables on learning achievement is a traditionally well-researched field of applied linguistics. In order to explain differences among learners concerning their success or the lack of it in L2 learning, a host of concepts and constructs have been investigated, such as age, gender, language-learning aptitude, motivation, learning style and strategies, anxiety, self-efficacy, and self-regulation. Concerning achievement in academic writing, we felt that the effect of the following variables might be of importance: L2 motivation, self-regulation, anxiety, and self-efficacy beliefs. What follows is a short description of each.

Success in language learning is often shaped by how much energy students are willing to invest into learning; in other words, how motivated the students are (Dörnyei and Ushioda 2011; Gardner 2010). Research efforts concentrate on first drawing up conceptual theories explaining important influences on students' motivation as well as the role of these influences on achievement. One of the first concepts to be investigated was how students' disposition towards the speakers of L2 and L2 itself has an impact on their intended effort put into learning (Gardner 2010). Next, classroom-centered issues were explored to see how language learning motivation works in foreign language contexts (Dörnyei 1994). Most recently, researchers have been interested in how self-related concepts influence L2 motivation and L2 learning (Dörnyei and Ushioda 2011). In our study, we employed the latter perspective and conceptualized Dörnyei's L2 Motivational Self-System to measure students' motivation (Dörnyei 2005, 2009). According to this theory, students' motivated learning behavior is affected by three variables: their ideal L2 self, that is, to what extent students can imagine themselves as highly proficient users of the given foreign language; their ought-to L2 self, which describes what outside pressures students acknowledge throughout the learning process that make them invest an increased amount of energy into language learning; and their language-learning experience, which indicates positive attitudes towards the classroom processes (Dörnyei and Ushioda 2011). As a result of a number of empirical studies (Dörnyei and Ushioda 2009), this theory received wide support in different contexts; therefore, we hypothesized that the L2 Motivational Self-System would also provide an adequate measure for the present study.

Apart from L2 motivation, taking responsibility for the learning process is another characteristic feature of successful learners. Studies related to self-regulation investigate to what extent students are able to regulate their learning process, and in

what ways they are capable of taking responsibility for their own learning (Forgas et al. 2009; Pintrich and De Groot 1990; Schunk and Zimmerman 2008). Self-regulation is a highly complex issue that does not lend itself easily to research; therefore, most often self-regulatory strategy use is measured, that is, what practical techniques students report that they employ in order to regulate their thinking and behavior. Kuhl's (1985) seminal work suggested that three main groups of strategies exert influence on learning: cognitive controls (attention, coding, and information processing), affective techniques (controlling emotions and motivation), and environment-related strategies.

Kuhl's theory concerned general learning, but his theory was also tailor-made to L2 learning. Tseng et al. (2006) conducted a questionnaire study to measure how vocabulary learning might be regulated through control variables. As a result of their quantitative data collection and subsequent factor analysis, five main self-regulatory strategies that contribute to vocabulary learning were defined: commitment control, that is, to what extent students establish short- and long-term goals and how they achieve these goals; metacognitive control, describing how students are able to focus and concentrate on learning; satiation control, explaining how boredom might be overcome during long and tedious tasks; emotional control, measuring how students cope with anxiety and other possibly disruptive emotions throughout the learning process; and environmental control, explaining how students might be able to create environmental support for learning. In the present investigation, we adapted these categories to writing in general and to academic writing in particular.

Another important construct to be explored is language-learning anxiety (MacIntyre and Gardner 1994). Studies in this field have explored the effects of negative emotions on L2 learning; for example, how language-use anxiety and foreign language-classroom anxiety have detrimental effects on L2 learning (Horwitz et al. 1986). Different classifications exist in the literature depending on whether anxiety either facilitates or debilitates or is seen as state or trait anxiety. Recently, learning skill-related classification has also been gaining impact, which shows that anxious feelings might be linked to different learning skills, and students might experience different levels of anxiety when speaking, listening, reading, or writing (Cheng et al. 1999; Brózik-Piniel unpublished). In our study, we employed one skill-related anxiety measure that collects data on to what extent students are anxious before, during, and after writing in English (Brózik-Piniel unpublished).

Finally, although anxiety is often seen as the ultimate negative measure of L2 learning, it is also important to include constructs that measure positive feelings towards L2 learning. Self-efficacy beliefs refer to what students think they are able to do well in the learning process (Brózik-Piniel and Csizér 2013). Hence, self-efficacy beliefs include individuals' own dispositions towards what they think they can do well and what tasks they can accomplish easily in the process of learning (Bandura 1993; Valentine et al. 2004, p. 111). In addition, self-efficacy beliefs are seen to affect students' goals, motivation, and anxiety; therefore, it seems important to investigate the ways in which students' own attitudes towards their capabilities might influence their actual achievement (Bandura 1993). The following section discusses the literature relevant for the analysis of argumentation.

2.2   Argumentation

Given that our study focused on arguments embedded in integral instances of written discourse, namely one-paragraph essays, the rhetorical structure of the argumentative essays was analyzed. The features of the argumentative essays we investigated were the presence of a functionally appropriate topic sentence, which is the functional equivalent of a thesis statement in that it expresses the main claim of the essay, the presence of the elements of the model of argument, and the type of argumentation structure.

Taxonomy of Claim Types

Based on a comprehensive review of the taxonomies of argumentative theses, Tankó and Tamási (2008) proposed a taxonomy of claim types that divides claims into two subtypes: non-relational and relational (Fig. 1). Non-relational claims focus on one core element about which they formulate an evaluation or in connection with which they articulate a recommendation. For example, the thesis statement, "The UK should not discourage immigrants from Eastern European countries," contains a simple policy claim that names a particular course of action (core element: UK's action) and states that it is undesirable (recommendation). In contrast, relational
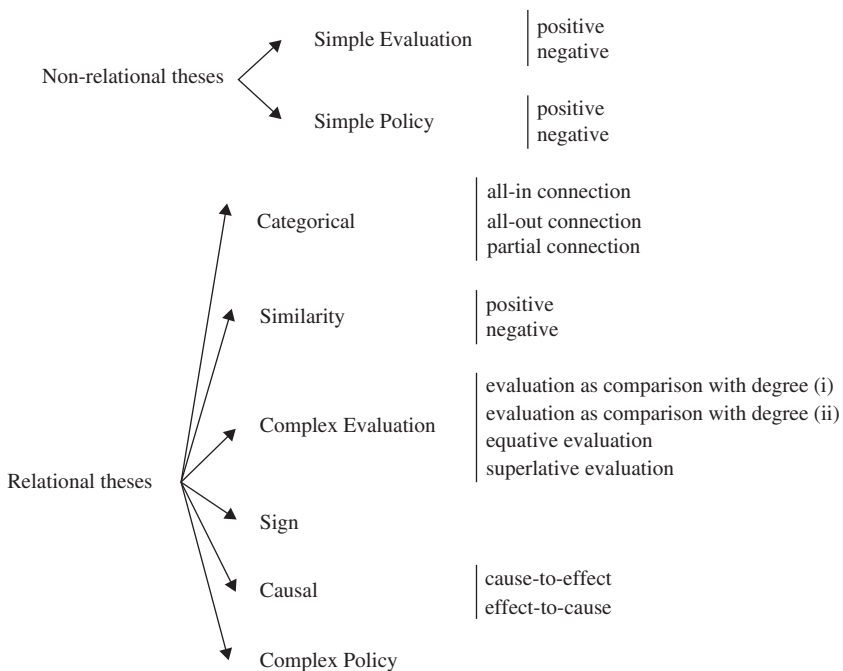

Fig. 1 The taxonomy of claim types

claims establish a connection between two core elements (e.g., by comparing or contrasting, as in the following thesis statement: "Blake's *Songs of Experience* are more dramatic than his *Songs of Innocence*.").

Tankó and Tamási (2008) found that in multi-paragraph argumentative essays students used mostly thesis statements expressing non-relational claims (75.67%), primarily of the simple policy (positive) and simple evaluation (positive) subtypes. The preferred relational claim types were causal (cause-to-effect) and categorical (all-in connection; p. 13) claims.

Toulmin Model of Argument

Toulmin (2003) stated that the function of an argument is the justification of a claim. He claimed that a "sound argument, a well-grounded or firmly-backed claim, is one which will stand up to criticism, one for which a case can be presented coming up to the standard required if it is to deserve a favorable verdict" (p. 8). Consequently, his concern was the development of such a layout for an argument that would capture the "sources of its validity" (p. 88). He therefore developed a model of the argument suitable for the analysis of real-life arguments in which, contrary to arguments in formal logic, the conclusion only follows from the premises with some degree of probability. Hence, the importance of the component of the model called modal qualifier, which is defined below.

The model further described in Toulmin et al. (1984) is suitable for the analysis of the structure of arguments. It consists of six components that can be grouped into two categories: the basic components in an argument are the claim, grounds, and warrant, which are conditioned by the backing, modal qualifier, and rebuttal (Fig. 2).

The first component, the claim, which serves as the conclusion of the argument, is the assertion that is to be justified. The claim is supported by explicit grounds, namely data on which the assertion is based. The third component, the warrant, is a proposition which attests that, taking into account the grounds, the claim is appropriate and legitimate. A warrant is an inference step from the grounds to the claim usually appealed to implicitly and can be, for example, a rule, a principle, or an inference license. If the warrant is challenged, assurance is given in the form of
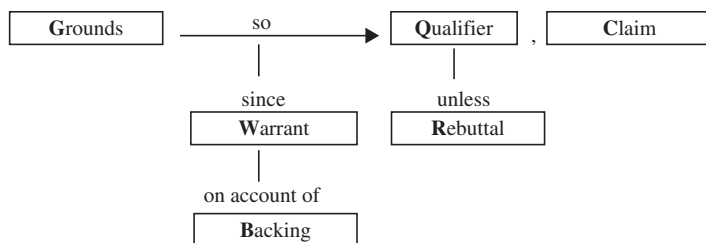

Fig. 2 The structure of Toulmin's model of argument (2003)

categorical statements of fact, e.g., laws or statistics, in order to confirm its authority and currency. This kind of support for the warrant is the backing, which may remain implicit unless the warrant is challenged. The fifth component is the modal qualifier. Modal qualifiers, such as the adverbs *necessarily*, *probably*, or *presumably*, indicate the strength of the step taken from the grounds to the claim. The final component, rebuttal, refers to circumstances in which the warrant lacks general authority. The use of the rebuttal can be perceived as an act of hedging in which the arguer intentionally weakens the claim.

The Toulmin model of argument has been widely used for a variety of purposes in research studies on argumentative texts. One of the most prominent uses of the model was for the construction of rating schemes for the evaluation of argumentative essays written by students. Connor and her fellow researchers produced a body of research (Carrell and Connor 1991; Connor 1987, 1993; Connor and Lauer 1988; Connor and Takala 1987; Crammond 1997, 1998; Ferris 1994; Lunsford 2002; Varghese and Abraham 1998; Yeh 1998) in which they used the same scale based on the Toulmin model in combination with various other methods in order to identify those variables that can best predict the quality of student writing and to describe differences in the argumentative texts of writers from different cultures. In several of these studies (e.g., Carrell and Connor 1991; Connor 1993; Connor and Lauer 1988), the Toulmin model of argument was used for the examination of the argument structure of full discourses. These studies investigated argumentative essays written by native English speaker students and non-native English speaker students in their L1.

Typology of Argumentation

Van Eemeren et al. (2002) proposed an argument structure taxonomy that categorizes arguments as instances of simple or complex argumentation. Simple argumentation is realized with the construction of a single argument consisting of a claim and one explicit premise (or grounds, according to Toulmin's terminology) serving as its support. Single arguments can combine to form complex argumentation. Several single arguments, each of which can independently support a claim, realize the type of argument structure called multiple argumentation. On the other hand, single arguments that need to be taken together to effectively support a claim form coordinative argumentation. Finally, the type of argumentation that consists of a chain of hierarchically organized single arguments constitutes subordinate argumentation. As described by Toulmin et al. (1984), Fulkerson (1996), and Lunsford (2002), an essay can be constructed as a single argument that contains one main claim and a minimum of one ground element presented as support for the claim, or it can be constructed as a complex argument consisting of a combination of several forms of argumentation. Fulkerson (1996), for example, proposed that an argumentative essay should be analyzed as consisting of a "nested group of sub-arguments" (p. 26), each of which can be paraphrased with the elements of the Toulmin model of argument. Short argumentative essays can feature either type of argument structure.

3   Research Questions

In this research study, we aimed to answer the following research questions:

1. How can high-achieving students' L2 motivation, self-regulation, anxiety, and self-efficacy beliefs be described?
2. What are the main and subclaim types used by high-achieving students?
3. Can high-achieving students establish an argumentative focus?
4. What characterizes the high-achieving students' use of the core components of the Toulmin model?
5. Which types of argumentation structures do high-achieving students use?

4   Methods

The study used mixed methods, combining research methods from quantitative and qualitative research. In what follows, we present a brief description of the participants, questionnaire, writing task, and data collection and analysis.

4.1   Participants

The participants of the study were 41 Hungarian L1 high-achieving English majors selected from 140 university students at a Hungarian university. Thirty-two of the participants were female (78%) and nine (22%) male. The average age of our participants was 20.5 (the youngest respondent was 18 years old, and the oldest was 32 years old), and 9.75% of our participants were older than 23. The participants typically started learning English between the ages of six and ten, and their level of English ranged from B2 to C1. In addition to English, the majority (68.29%) also reported that they were learning another foreign language. The most popular third languages included German, Spanish, Italian, and French. At the time of the data collection, all the participants were first-year BA students who attended a compulsory course on writing English for academic purposes.

4.2   The Questionnaire

The questionnaire included 73 items, among which five were open-ended items at the end of the instrument, inquiring about students' age, gender, and foreign language learning background. All the other items used 5-point rating scales. The items of the questionnaire came from several sources (Bandura 2006; Kormos and Csizér 2008; Brózik-Piniel unpublished; Ryan 2005; Tseng et al. 2006), but all the items

asking about language learning in general were adapted to writing in English. The final instrument was piloted with 79 students in the autumn term of 2011 (Csizér 2012). The constructs of the questionnaire are as follows (for further details, also see Tankó and Csizér 2014):

(a) Motivated learning behavior (five items) describes how much effort students are willing to invest in language learning. Sample item: *I do my best to learn English as well as possible*.
(b) Ideal L2 self (four items) measures students' vision about their future language use. Sample item: *When I think of my future career, I imagine being able to use English on a near-native level*.
(c) Ought-to L2 self (seven items) asks about external pressures concerning learning English. Sample item: *I feel that I am expected to speak English like a native*.
(d) Language-learning experience (four items) inquires about participants' past experiences in learning English. Sample item: *I always liked the tasks we did in English classes at my secondary school*.
(e) International orientation (four items) describes students' attitudes towards the global status of English. Sample item: *It is necessary to learn English because it is an international language*.
(f) Writing anxiety (eight items) includes statements about students' anxiety concerning writing tasks at the university. Sample item: *When I hand in a written assignment, I am anxious about my tutor's opinion*.
(g) Self-efficacy (nine items) measures to what extent students think that they are able to complete their writing assignments self-confidently and with ease. Sample item: *I am sure that I can complete any writing tasks in English*.
(h) Self-regulated behavior (twenty items) included five subscales on how much responsibility students can take for their own learning. All scales related to various control measures and they were as follows: environmental control (sample item: *I can concentrate on writing in less than ideal environments as well*.); satiation control (sample item: *If I get bored during a writing task, I can easily overcome this boredom*.); metacognitive control (sample item: *I can control my attention during long writing tasks*.); emotional control (sample item: *I can overcome my anxiety concerning writing in English*.); and commitment control (sample item: *I have my own strategies to complete my writing-related goals*.).

The reliability analysis of the scales can be found in Csizér and Tankó (2017).

4.3   The Short Essay

The writing task the students were administered was a short argumentative essay. In the course of the writing English for academic purposes training, students practiced constructing written arguments and embedding them into essays. In order to optimize the conditions for multiple drafting and to accelerate peer- and tutor-written

feedback provision, as well as to give students the opportunity to create whole pieces of academic written discourse that have texture (Halliday and Hasan 1976) and feature all the core rhetorical components of longer formal texts, the essay type selected for the study was the one-paragraph argumentative essay. This essay sub-genre is typically used for pedagogical purposes (Henry and Roseberry 1999) and consists of a title, an introduction, a body, and a conclusion. Each of these rhetorical components allows students to practice the realization of the various rhetorical goals they need for writing longer academic assignments, which can range from multi-paragraph essays, through seminar papers, to bachelor's or master's theses.

The essays were written as part of a centrally administered timed examination. Students were given a topic related to university education, namely the attendance of university lectures, with which they were familiar and on which they could take an argumentative stance, formulate a claim based on their stance, and build support for it relying solely on their background knowledge. Topic familiarity was an important factor in task design because language testers claim that it affects the quality of written production (Weigle 2002, pp. 44–45) and has a potential impact on revision (Porte 1996, p. 111). In order to reduce the amount of anxiety induced by the time constraint, which can also have a negative effect on the efficiency of revision (Porte 1996, p. 113), the length for the essay was specified as ranging from 130 to 150 words, which is almost identical to the average length of a paragraph in an English language expository academic text written by an adult English native-speaker academic (Simpson 2000, pp. 298–299). Research has also shown (Bridwell 1980, pp. 216–217) that the shorter and less laborious it is to revise a script, the more substantial revision student writers perform. Therefore, with the decisions on topic choice, length requirement, and time allotted for the completion of the task, we aimed to optimize the conditions for composing the argumentative essay.

4.4   Data Collection and Analysis

The questionnaire data collection took place in March 2012. During regular classes, students were asked by their tutors to fill in the standardized questionnaire, the completion of which took approximately 20 minutes. Participation was voluntary, but the questionnaire asked for the students' identification codes in order to be able to match the questionnaire data with the data generated through the analyses of the essays.

Questionnaire data was computer coded using SPSS 16.0 for Windows. The essays were analyzed, and the numerical results were also added to the file. The data analysis presented here includes descriptive statistics on high-achieving students.

The argumentative essays were written in March 2012 as part of an academic skills test. The test was administered for all first-year students, and every student took it at the same time. The time allotted for the completion of the essay-writing task was 45 minutes, but students who completed the essay earlier were allowed to start working on the remaining test tasks.

The essays were rated independently by two raters, following a rater-training session. The analytic scale consisting of four subscales used for rating was developed specifically for this test based on Tankó (2005). The two raters independently awarded four subscores and each calculated a total score for the essays. Following this, they compared their scores and agreed on the final subscores and total score according to the rules specified in a guidelines for raters. The final scores were used to select the top 30% of the essays for this study. The top score that could be awarded for the essay was 15 points. Of the 41 high-achieving students, 26 (63.4%) scored 13 points, 14 (34.1%) scored 14 points, and 1 scored 15 points.

The essays were scanned before the rating stage and typed up. The analytical tools used for the analysis of the essays were the taxonomy of argumentative theses (Tankó and Tamási 2008), the justificatory argument model (Toulmin 2003; Toulmin et al. 1984), and the typology of complex argumentation (Van Eemeren et al. 2002). Two analysts independently analyzed each essay (Percentage agreement = 0.923).

5   Results and Discussion

5.1   The ID Variables Profile of High-Achieving Students

As can be seen from Table 1, high-achieving students show exceptionally high values concerning their motivated learning behavior; that is, they are willing to invest as much energy into the writing process as necessary to produce good academic texts. Interestingly enough, the mean value of their ideal L2 self-scale is even higher. It seems that they consider it even more important to have clear future-related guides to show them what they need to achieve in the future. In other words, their invested effort is directed towards very clear future aims. This draws our attention to the fact that in regard to academic writing, it is very important to explain to students why the

Table 1 Descriptive statistics of ID variables

	Scales	M ($n = 41$)	SD
1.	Motivated learning behavior	4.55	0.47
2.	Ideal L2 self	4.72	0.29
3.	Ought-to L2 self	3.71	0.53
4.	Language-learning experience	3.90	1.05
5.	International orientation	4.29	0.43
6.	Writing anxiety	2.72	2.72
7.	Self-efficacy	3.66	0.61
8.	Environmental control	3.77	0.60
9.	Satiation control	3.84	0.66
10.	Metacognitive control	3.98	0.84
11.	Emotional control	3.94	0.76
12.	Commitment control	3.46	0.73

various skills and sub-skills might be important for them in the future and to help them develop future visions to guide them. Based on the result related to high achieving students' ought-to L2 self, it seems that the role of outside pressure is markedly lower than the role of their ideal L2 self (M = 3.71 and M = 4.72, respectively). The fact that the mean value of their language-learning experience does not reach 4 (M = 3.90) indicates that these high-achieving students are not completely satisfied with their learning experience, and yet they can still find sources to motivate themselves. How they do that is a question that we cannot answer based on the anxiety, self-efficacy, and control-related results, as all of these seem to be close to the average. Further research is certainly needed to investigate the source of these students' motivation and resulting high achievement.

5.2 The Argumentation Skills of High-Achieving Students

The following section presents the findings related to the use of main claims and the success with which students managed to establish an argumentative focus for their essays. This is followed by an analysis of subclaims. The findings related to the use of the problematic key components of the Toulmin model of argument in both the main and subclaims are then presented. The section concludes with a description of the argumentation structures used in the essays.

Main Claims Used and the Establishment of an Argumentative Focus

High achieving students used only two types of main claim in 37 out of the 41 essays: simple policy (n = 21) and simple evaluation (n = 16). In connection with the topic of university attendance, this means that they chose to formulate a desirable course of action to be taken (8 students argued that attendance should be obligatory whereas 13 argued that it should not be obligatory) or an evaluation (6 students claimed that making lecture attendance obligatory is advisable, and 10 claimed that it is not). Therefore, just over half of the high achieving students (56.09%) argued with two non-relational main claim types for the attendance of university lectures not to be obligatory.

Because it requires more complex argumentation to substantiate relational claims, it could be argued that the students chose non-relational claim types as a result of the brevity of the essay they were instructed to write. However, as an earlier study (Tankó and Tamási 2008) showed, the majority of test takers, who were overall more proficient speakers of English and more skilled academic writers than the students in this study, also opted for non-relational theses when writing multi-paragraph essays that were almost four times longer than the essays investigated in this study. The results of these two studies seem to show a preference for non-relational claims that is independent of the essay length specification.

In the essays investigated in this study, high achieving students rarely lost their argumentative focus. This is in contrast with the findings reported by Tankó (2013) following the analysis of a large body of argumentative essays written by not only high achieving but by all first-year students as part of an academic skills test. Students in that study tended to write bifurcated or trifurcated main claims in which, instead of one claim to be supported in the essays, they formulated two or three separate main claims and thus lost their argumentative focus and weakened the rhetorical effectiveness of their essays. In contrast, high achieving students seemed to have mastered the skills for establishing a clear argumentative focus because only two cases were found among the 41 essays where a main claim contained two distinct claims/foci:

1. *In my opinion obligatory attendance of university lectures is <u>necessary</u>* (Focus 1) *and <u>useful</u>* (Focus 2). [Essay F-02]
2. *The idea of making attendance of university lectures obligatory is just simply <u>irrational</u>* (Focus 1) *and <u>bad</u>* (Focus 1). [Essay G-08]

However, the two foci in both these cases are closely related because the students focused ultimately on one aspect (make attendance obligatory [Essay F-02], and do not make it obligatory [Essay G-08]); therefore, the support built for the claim could disambiguate the argumentative focus of the writer and consequently diminish any potential negative effect on the coherence of the argument.

Refutations can strengthen arguments and also establish a strong argumentative focus. In two essays out of the 41, the students took a powerful and straightforward rhetorical stance by embedding the main claim into a refutation.

3. *The obligatory attendance of university lectures is theoretically a good idea, but in practice, it is hardly possible to establish it.* [Essay A-05]
4. *The obligatory attendance of university lectures, even though the idea is opposed by some, is beneficial for students.* [Essay A-03]

The first example illustrates the use of a quasi-concession: a statement that only seemingly grants the validity of the opponent's claim. The second example shows that the opponent's claim is countered by the writer's claim.

Subclaims

High achieving students could potentially use any of the non-relational and relational claims from the taxonomy of claims (Tankó and Tamási 2008) to formulate subclaims. In contrast to the use of main claims, subclaim use shows more variation: Students used, in addition to the two non-relational claim types, three relational claim types (causal, complex evaluation, and categorical claims). Only the claim options similarity, sign, and complex policy claims were not used (Table 2).

These results show that students are also familiar with specific non-relational claim types, but they are unwilling to use them as main claims in their essays. The relational claims they avoided do indeed require complex support that necessitates the construction of complex rhetorical structures, which may not be feasible in short essays.

Table 2 The subclaim types used

Subclaim	Frequency	%
Simple evaluation	69	50.7
Causal	37	27.2
Simple policy	11	8.1
Complex evaluation	10	7.4
Categorical	9	6.6
Total	136	100.0

The Use of Modal Qualifiers

This section focuses on the third core element of the Toulmin model, the modal qualifier, which serves to indicate the strength of an argument. The strength of the argument is determined by several factors: One of them is the rebuttal condition, as a result of which the claim of an argument often only stands with some degree of probability. This has to be indicated with a qualifier. However, high-achieving students used few qualifiers and very rarely in their main claims; they resorted solely to modals such as *would* or *should* as illustrated in the following examples:

5. *Making the attendance of university lectures obligatory would be a bad idea for several reasons.* [Essay I-05]
6. *There are several reasons why university lecturers should not be obligatory.* [Essay K-14]

The use of modal qualifiers is a little more varied in the subclaims. In addition to *would* and *should*, students used other modals (*may*, *might*, *can*, and *could*), a few adverbs (*often*, *sometimes*, *probably*, and *likely*) and occasionally adjectives (*possible*) as shown in the following examples:

7. *… they might disturb both the students and the lecturer by eating or talking.* [Essay A-09]
8. *Secondly, the presence of a whole year in a classroom may cause problems.* [Essay F-09]
9. *Secondly, studying from just books can be more difficult.* [Essay M-01]
10. *This could provide some free seats for those who are really motivated and ambitious.* [Essay L-03]
11. *They are likely to catch these hints and make use of them, ...* [Essay D-01]
12. *Therefore, they will probably pass the exam.* [Essay D-01]

It is to be noted that as shown in the last two examples, the more varied use of qualifiers was characteristic of the same few students. The small number of modal qualifiers used indicates that high achieving students have not fully mastered cogent argumentation and that this is an area where they need further support.
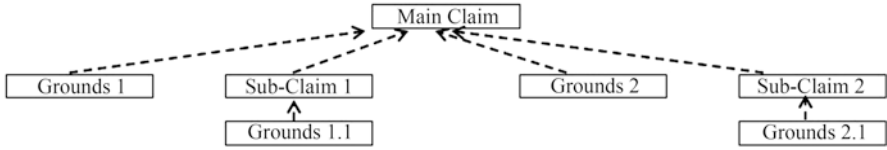
Fig. 3 Complex argumentation structure

Argument Structure Types

High achieving students used primarily single argumentation (66.4%) and some instances of coordinative (21.9%) and subordinative argumentation (10.2%). The least frequent argument structure type was multiple argumentation, of which only two instances were found. This shows that students most often produced support that consisted of arguments containing a subclaim and one supporting idea (or grounds, using Toulmin's terminology). The second most frequent support consisted of one subclaim typically based on two or, rarely, three supporting ideas. Therefore, all the claims were substantiated, but the strongest argumentation structure, multiple argumentation, was used the least frequently.

Occasionally, the students mixed different argumentation structures. Subclaims and their grounds, which together served each as a supporting argument, were used together with ideas that served as direct support for the main claim. This resulted in the complex argumentation structure shown in Fig. 3.

In only one case did a student construct an argument that consisted of one main claim supported entirely by individual direct pieces of support: four premises that served as individual grounds (as in the Toulmin model of argument). However, the varied argumentation structures and the uses of refutation as an argumentation structure show that complex arguments can be built even in such a short argumentative essay as the one-paragraph essay investigated and that high-achieving students are not only willing to experiment with argument construction but are also successful at it.

6 Conclusions

The analysis of ID variables has shown that high achieving students are highly motivated writers of academic texts. They have a clear understanding of the ways in which written academic argumentation is likely to be of use to them in the future, and they do not seem to need excessive outside pressure to invest an increased amount of energy into the development of academic writing skills. These findings underline the importance of helping students understand the purpose of academic writing and of assisting them to build an image of themselves as highly proficient writers of academic English.

Based on the analysis of the written argumentation skills of high achieving students, a number of recommendations can be formulated: Teachers of academic writing skills should familiarize students with relational claim types and practice building support for such claims with them. Familiarity with various claim types is likely to result in a larger variety of essays with varied rhetorical structures determined by the type of support built to substantiate the claim type (c.f., Fahnestock and Secor 2000, 2004). Even some of the high-achieving students need to practice writing theses that contain only one well-formulated claim. Furthermore, teachers should make students familiar with refutation (e.g., Tankó 2012 discusses the schematic structure of refutation together with concession) and practice it. Familiarity with refutation allows students to engage in a more interactive and focused academic discussion with other writers whose claims they need to (partially) concede to or refute. More attention must be devoted to the use of modal qualifiers, and this should be taught with a thorough understanding of the structure of arguments and the relationship between the individual components of an argument. A thorough understanding of the rebuttal element is imperative for the appropriate use of qualifiers. Finally, starting out from the Toulmin model of argument and then moving on to the complex argument structures, even high achieving students need to practice the various argumentation structure types. From the types of complex argumentation, they need to focus especially on multiple argumentation.

It has also been established in the course of our analysis that further research is needed to investigate the source of high-achieving students' motivation as well as their use of non-relational claim types in the body of their essays and not as main claims.

References

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(1), 117–148.

Bandura, A. (2006). Guide to the construction of self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (Vol. 5, pp. 307–337). Greenwich: Information Age Publishing.

Bridwell, L. S. (1980). Revising strategies in twelfth grade students' transactional writing. *Research in the Teaching of English, 14*(3), 197–222.

Brózik-Piniel, K. (unpublished). Kérdőív a négy alapkészséggel kapcsolatos szorongás mérésére.

Brózik-Piniel, K., & Csizér, K. (2013). L2 motivation, anxiety and self-efficacy: The interrelationship of individual variables in the secondary school context. *Studies in Second Language Learning and Teaching, 3*(4), 523–546.

Carrell, P. L., & Connor, U. (1991). Reading and writing descriptive and persuasive texts. *Modern Language Journal, 75*(3), 314–324.

Cheng, Y.-S., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning, 49*(3), 417–446.

Connor, U. (1987). Argumentative patterns in student essays: Cross-cultural differences. In U. Connor & R. B. Kaplan (Eds.), *Writing across languages: Analysis of L2 text* (pp. 57–72). Reading: Addison-Wesley.

Connor, U. (1993). Linguistic/rhetorical measure for evaluating ESL writing. In L. Hamp-Lyons (Ed.), *Assessing second language writing in academic contexts* (pp. 215–225). Norwood: Ablex.

Connor, U., & Lauer, J. (1988). Cross-cultural variation in persuasive student writing. In A. Purves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric* (pp. 109–137). Newbury Park: Sage.

Connor, U., & Takala, S. (1987). Predictors of persuasive essay writing: Some pilot test results in the United States and England. In R. E. Degenhart (Ed.), *Assessment of student writing in an international context* (pp. 187–205). Jyväskylä: University of Jyväskylä Press.

Crammond, J. G. (1997). *An analysis of argument structure in expert and student persuasive writing*. Unpublished doctoral dissertation, McGill University, Montreal.

Crammond, J. G. (1998). The uses and complexity of argument structures in expert and student persuasive writing. *Written Communication, 15*(2), 230–269.

Csizér, K. (2012). A második nyelvi motivációs énrendszer, az önszabályozó tanulás és az énhatékonysági képzetek szerepe a nyelvtanulási motivációban: Egy kérdőíves vizsgálat angol szakos egyetemisták körében [The role of the L2 motivational self system, self-regulatory learning and self-efficacy beliefs in L2 learning motivation: The results of a questionnaire study among English majors]. *Iskolakultúra, 22*(11), 42–51.

Csizér, K., & Tankó, Gy. (2017). English majors' self-regulatory control strategy use in academic writing and its relation to L2 motivation, *Applied Linguistics, 38*(3), 386–404.

Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *Modern Language Journal, 78*(3), 273–284.

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah: Lawrence Erlbaum.

Dörnyei, Z. (2009). *The psychology of second language acquisition*. Oxford: Oxford University Press.

Dörnyei, Z., & Ushioda, E. (2009). *Motivation, language identity and the L2 self*. Bristol: Multilingual Matters.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Harlow: Longman.

Fahnestock, J., & Secor, M. (2000). Teaching argument: A theory of types. In E. P. J. Corbett, N. Myers, & G. Tate (Eds.), *The writing teacher's sourcebook* (4th ed., pp. 222–230). New York: Oxford University Press.

Fahnestock, J., & Secor, M. (2004). *A rhetoric of argument* (3rd ed.). New York: McGaw.

Ferris, D. (1994). Rhetorical strategies in student persuasive writing: Differences between native and non-native English speakers. *Research in the Teaching of English, 28*(1), 45–65.

Forgas, J. P., Baumeister, R. F., & Dianne, M. T. (2009). *Psychology of self-regulation*. New York: Psychology Press.

Fulkerson, R. (1996). *Teaching the argument in writing*. Urbana: NCTE.

Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model*. New York: Peter Lang.

Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. London: Longman.

Henry, A., & Roseberry, R. L. (1999). Raising awareness of the generic structure and linguistic features of essay introductions. *Language Awareness, 8*(3&4), 190–200.

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal, 70*(1), 125–132.

Kormos, J., & Csizér, K. (2008). Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves and motivated learning behaviour. *Language Learning, 58*(2), 327–355.

Kuhl, J. (1985). Volitional mediators of cognition-behavior consistency: Self-regulatory processes and action versus state orientation. In J. Kuhl & J. Beckmann (Eds.), *Motivation, intention and volition* (pp. 279–291). Berlin: Springer.

Lunsford, K. J. (2002). Contextualising Toulmin's model in the writing classroom: A case study. *Written Communication, 19*(1), 109–174.

MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning, 44*(2), 283–305.

Pintrich, P. R., & De Groot, E. V. (1990). Motivation and self-regulated learning components of academic performance. *Journal of Educational Psychology, 82*(1), 33–40.

Porte, G. (1996). When writing fails: How academic context and past learning experiences shape revision. *System, 24*(1), 107–116.

Ryan, S. (2005). *Motivational factors questionnaire*. Nottingham: School of English Studies, University of Nottingham.

Schmitt, N. (2002). *An introduction to applied linguistics*. London: Arnold Publishers.

Schunk, D. H., & Zimmerman, B. J. (2008). *Self-regulated learning: From teaching to self-reflective practice*. New York: Guilford Press.

Simpson, J. M. (2000). Topical structure analysis of academic paragraphs in English and Spanish. *Journal of Second Language Writing, 9*(3), 293–309.

Tankó, Gy. (2005). *Into Europe: The writing handbook*. Budapest: Teleki László Foundation/British Council.

Tankó, Gy. (2012). *Professional writing: The academic context* (Rev. 2nd ed.). Budapest: Eötvös University Press.

Tankó, Gy. (2013, March). *The quality of argumentation in EFL student writing*. Paper presented at the AAAL 2013 conference, Dallas, United States of America.

Tankó, Gy., & Csizér, K. (2014). Investigating English majors' individual differences through their argumentative essays. In V. Ruttkay & B. Gárdos (Eds.), *HUSSE 11 proceedings of the 11th conference of the Hungarian society for the study of English* (pp. 701–718). Budapest: L'Harmattan.

Tankó, Gy., & Tamási, G. J. (2008). A comprehensive taxonomy of argumentative thesis statements: A preliminary pilot study. *Working Papers in Language Pedagogy*, *2*, 1−17. Available online at: http://langped.elte.hu/WoPaLParticles/W2TankoTamasi.pdf

Toulmin, S. E. (2003). *The uses of argument*. Cambridge: Cambridge University Press.

Toulmin, S. E., Rieke, R. D., & Janik, A. (1984). *An introduction to reasoning* (2nd ed.). New York: Collier Macmillan.

Tseng, W.-T., Dörnyei, Z., & Schmitt, N. (2006). A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics, 27*(1), 78–102.

Valentine, J. C., DuBois, D. L., & Cooper, H. (2004). The relation between self-beliefs and academic achievement: A meta-analytic review. *Educational Psychologist, 39*(1), 111–133.

Van Eemeren, F. H., Grootendorst, R., & Snoeck-Henkemans, A. F. (2002). *Argumentation analysis, evaluation, presentation*. Mahwah: Lawrence Erlbaum Associates.

Varghese, S., & Abraham, S. A. (1998). Undergraduates arguing a case. *Journal of Second Language Writing, 7*(3), 287–306.

Weigle, S. (2002). *Assessing writing*. Cambridge: Cambridge University Press.

Yeh, S. S. (1998). Validation of a scheme for assessing argumentative writing of middle school students. *Assessing Writing, 5*(1), 123–150.