# A LOOK AT SECOND LANGUAGE LEARNERS'
# TASK MOTIVATION

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**Abstract**

In this study, part of a larger project, I explore a) the possible relationship between task motivation as operationalized in Dörnyei's Process model of motivation and linguistic variables in a written production task, and b) the differences in performance between two task motivation groups. This model has proven valid with oral argumentative tasks and now its main tenets are tested using a semi-guided writing activity. 65 students of Spanish at Georgetown University took part in this project. In this preliminary analysis, correlations between task motivation and linguistic variables were carried out to ascertain the possible relationships. Also, Independent samples *t*-test analysis served as a tool to establish possible significant differences among two task motivation groups. Results show that task motivation indeed holds a significant positive linear relationship with the linguistic variables investigated. Results also show the high motivation group significantly outperforms the low motivation group.

## 1. Introduction

The purpose of the present study is to assess the impact of task motivation on the quality and quantity of second language (L2) writing produced by college-level foreign language students in a semi-guided writing task. Given that Dörnyei's Process Model of motivation (Dörnyei 2000, Dörnyei and Ottó 1998) has been successfully used to account for L2 performance in the context of oral argumentative tasks, the next logical step is to test the model with tasks that promote the learning of other L2 skills, in this case, written skills.

To this end, a semi-guided L2 writing task was designed and the Process model was followed. In the manner of Dörnyei and associates (Dörnyei 2002, Dörnyei and Kormos 2000, Kormos and Dörnyei 2004) a number of motivational variables were tapped into through a questionnaire. As far as syntactic complexity measures are concerned, five variables were employed adapting the ones used in the oral argumentative tasks. L2 writing literature is rich in studies using syntactic complexity measures in very different contexts, which often makes it difficult to draw general conclusions. In their research syntheses, Wolfe-Quintero et al (1998) and Ortega (2003) successfully attempted to uncover the commonalities and interpret results across studies. Hence, these two studies serve as a source for the measures utilized in this study.

In this study I report results of correlation and independent samples *t*-test analyses for the main motivational variable in the model, task motivation, which lies at the heart of this Process model. This is a situated model of motivation in which tasks are the unit on which the whole theoretical framework is based. In my view, if results for task motivation are not significant, the foundations of the model are greatly affected; therefore, the preliminary analysis of task motivation by itself is necessary. If need be, further analysis of the data gathered for this study will reveal the relationships between the other motivational variables tapped into and the linguistic variables as well as differences in performance by the two different proficiency groups present in the pool of participants.

## 2. Motivation and second language acquisition (SLA)

The impact of motivation on the second or foreign language (Oxford 1996) acquisition process has been the subject of investigation for almost forty years. Despite clear differences in their approach as well as in their operationalization of the construct (for reviews, see Dörnyei 1998, 2001, Gardner & MacIntyre 1993), results of these studies have consistently shown a strong correlation between motivation and language learning success.

However, it has been argued that this research has remained isolated from conventional applied linguistics research due to the macro perspective it tends to adopt (Kormos and Dörnyei 2004).

Dörnyei & Ottó (1998), as part of a research project that aimed at motivating foreign language learners in the classroom, found that the models proposed until then lacked what they considered paramount to the investigation of motivation in language learning. First, they lacked a sufficiently detailed description of all the motivational influences in the classroom. Second, they focused on the how and the why of certain courses of action "while playing down the importance of motivational sources of executing goal-directed behaviour" (Dörnyei and Ottó 1998: 43). Finally, they did not consider motivation in its temporal dimension, which is so important in the Process Model of motivation. Here, motivation is seen as ever changing, dynamically evolving towards the completion of some goal.

To contribute to the investigation of these aspects in L2 motivation, Dörnyei's Process Model of motivation (Dörnyei 2000; Dörnyei and Ottó 1998) emerges, based on the "Action Control Theory", from mainstream motivational literature. It is an attempt to capture more specific aspects of the learning situation, in which the tasks involved have special relevance, as well as to look at the "dynamic motivational processes that take place during task completion" (Dörnyei 2002: 139) This is no place to describe their Action Theory in detail (see Dörnyei and Ottó 1998 for summary of main tenets); it will suffice to say that the Process Model of motivation has its antecedents in the work of mainstream educational motivation scholars (Heckhausen 1991, Kuhl 1984). These authors make a difference between two kinds of processing: predecisional and postdecisional. The former makes reference to the cognitive processing involved in the setting of goals, whereas the latter involves those cognitive activities subsequent to goal setting. In this manner, those activities at the predecisional stage are motivational in nature while those at the postdecisional stage

are volitional (Pintrich and Schunk 1996). These two stages suggest a temporal continuum that allows for the sequences of events to be separated (Heckhausen 1991).

This kind of approach, therefore, looks for the changes in the motivational continuum by considering the different stages in the motivational process in ongoing social activities such as classroom learning (Dörnyei 2002).

The idea behind the model is that, first, motivation has to be generated (choice motivation); second, the generated motivation has to be actively maintained and protected while the action lasts (executive motivation); finally, in the phase following the completion of the action (motivational retrospection), retrospective evaluation of the action must be carried out (Dörnyei 2003).

Research using this Process Model of L2 motivation does not abound, since it is very recent; however, in a study carried out by MacIntyre and associates (MacIntyre et al., 2001) they test for overlap between motivation concepts coming from different models, one of which is Action Control theory proposed by Kuhl and associates. MacIntyre et al. (2001) run factor analyses to conclude that the factor Action Motivation can be separated as an independent factor, which would validate the Process Model of motivation.

Tasks are the basic unit of analysis on which this model is based. Not only is it a logical step, given the shift from a more general perspective on L2 motivation to a more situated, classroom based approach, but also it is an important link between the study of L2 motivation and instructed SLA where tasks have been analyzed both from a language processing perspective and from a methodological perspective (Dörnyei 2002).

Tasks were first emphasized in L2 motivation by Ushioda (1996) and Julkunen (2001) who also investigated the relationship between learning tasks and motivation. However, their approach was much more static because they failed to account for the fact that complex learning behaviors could last for a considerably long period of time (Kormos and Dörnyei 2004). These authors did not take into consideration the different phases involved in the motivational processes around the realization of learning tasks.

The next step is therefore to define *tasks* in the context of the Process Model of motivation: "tasks can be seen as primary instructional variables or building blocks of classroom learning" (Dörnyei 2002: 137). Dörnyei (2002) settles the matter: the importance of the tasks being well delimited is stressed, that is, being able to determine where the task starts and where it ends needs to be clear, since tasks, as conceived here, are "discrete units of situated learning behaviors" (Dörnyei 2002: 139).

In this fashion, Dörnyei & Kormos (2000), Dörnyei (2002) and Kormos & Dörnyei (2004) investigated the effects of motivation in oral argumentative tasks. They all use data from a British-Hungarian research project in which "the research objective was to examine how motivational factors affect the quality and the quantity of student performance in an L2 communicative task performed in dyads" (Kormos and Dörnyei 2004: 4). 44 Hungarian students (aged 16-17) learning English as a foreign language participated in this research project. In the first study, Dörnyei & Kormos (2000) look into the effects of some socio-affective variables on the way foreign language (L2) learners' engage in oral argumentative tasks. These variables included several aspects of L2 motivation and some factors that characterized the groups the

participants belonged to (such as group cohesiveness and intermember relations), as well as the learners' L2 proficiency and 'willingness to communicate' in their L1. As dependent variables, different measures of L2 output in two argumentative tasks were included. The results evidenced that it was a combination and interaction of variables that could be used to predict task performance. For example, linguistic confidence only affected task engagement among students with a positive attitude toward the task, whereas social factors affected task engagement in different ways depending on the task attitudes. This fact made the authors conclude that "task attitudes appear to function like a filter: if they are positive then the learner's performance follows 'regular' patterns……however, if the filter is 'up', that is, if students assume negative attitudes towards the particular task examined, their performance becomes somewhat random" (Dörnyei and Kormos 2000: 295-96). Furthermore, when the language task was changed to their L1, the motivational pattern was different.

In the second study, Dörnyei (2002) investigates the relationship between motivational variables and the number of words and turns used in oral argumentative tasks. Correlation analyses were carried out to show that when "the relationship between motivation and concrete learning behavioral measures is assessed we can obtain considerably higher correlations than when motivation is related to global achievement measures" (Dörnyei 2002: 155). This would support the use of concrete learning tasks and the process oriented approach that accounts for fluctuations in motivation depending on several factors surrounding the concrete learning action taking place. In the third study, Kormos & Dörnyei (2004) not only investigated speech quantity, but they also included other linguistic measures such as number of words, number of turns, accuracy, complexity, lexical richness, number of arguments and counter-arguments. They run correlation analyses between these and the following motivational variables included in a questionnaire: Integrativeness, Incentive values of English proficiency, Attitudes towards the English course, Linguistic confidence, Language use anxiety, Task attitudes and Willingness to communicate (WTC). Given the large amount of variables involved, the results were complex: first, there were significant positive correlations between the quantity of speech and Course attitudes and Task attitudes, also between speech confidence and speech size. All in all, motivational variables explain a little more than one third of the variance (35-37%) in the quantity of speech produced. WTC was significantly correlated to the number of turns produced and Accuracy to Course Attitudes. Overall, motivational variables explain a low percentage (9-16%) of the variance in accuracy, complexity and lexical richness and a little less than one third of the variance (30%) in the number of turns produced.

Based on the findings reported in Dörnyei (2002), these authors expected to find stronger correlations between motivation and actual learning behavior. Kormos & Dörnyei (2004) explain this fact by looking at the possible intervening variables such as the participants' level of proficiency or the "diversity of students' attitude to the task that influenced their behavior to a considerable extent" (Kormos and Dörnyei 2004: 10). As in Dörnyei & Kormos (2000), attitudes towards the task seemed to be a crucial factor in predicting further behavior. Participants were then divided into 'high-task attitude' (the upper half of the sample) and 'low-task attitude' (the lower half of the sample) to run the same correlation analyses reported above in the two

samples separately. The authors found "high correlations between the composite of motivational variables and complexity and the number of arguments produced in the high-task attitude sub-sample" (Kormos and Dörnyei 2004: 12).

In general, Kormos & Dörnyei (2004) conclude that motivation influenced the quantity and not the quality of talk produced. When the whole sample was considered, it was the course attitudes that had a positive significant effect on accuracy, and when the sample was sub-divided, it was the attitudes towards the language course itself that had a positive effect even if they did not like the specific tasks.

To sum up, even if the results of these studies are complex and have to be interpreted in relation to each other, it can be concluded that motivation as operationalized and measured in the context of this model, has a positive influence, whether on quantity or quality, on the outcome of the oral argumentative tasks used in these studies. Also, these studies support the use of a process oriented approach that is able to account for motivation not being static and having different phases in the context of foreign language learning through tasks.

In the present study, however, it is another type of task that will be investigated: a semi-guided writing task. Following the aforementioned definition of task (Dörnyei 2000), there are myriads of activities taking place in the L2 classrooms that should be considered as such. Therefore, Dörnyei's process model of motivation should serve as a valid tool to explain, at least in part, as it did with oral argumentative tasks, L2 performance in a writing task. Furthermore, in order for the model to be validated outside the scope of oral tasks, a preliminary step has to be taken: the validation of the main concept in the model, which is, in my view, task motivation. This is what I intend to do in this paper, pending further analysis of data gathered.

## 3. Second language writing

Currently, L2 writing skills are consistently worked on in almost every college second language program. Different L2 writing curricula have been made available to instructors. It is therefore widely acknowledged that developing this skill is as important as developing the speaking, listening, or reading skills. As in any other task taking place in the second language classroom, it is also to be expected that learners' motivation plays a crucial role in the outcome of the activity.

As far as L2 writing research is concerned, the field has grown and developed in an unparallel manner for at least the last 40 years. There is a wealth of research traditions with their own agendas and ideas of what should be investigated. Further complicating matters, the advent of the World Wide Web and its related technologies adds an element to the L2 writing field that cannot be overlooked due to its relevance and influence in today's society (for an overview, see Matsuda et al. 2004).

One of the strands of research in the field investigates possible measures for L2 writing and their relationship to L2 proficiency and development. Here, the focus is on how to better measure the learner's written production to match it with certain proficiency levels and to delimit a path of L2 writing development. It is this part of the field that is of interest for my purposes in this study, since I will be using some of the measures typically used by researches in this line of work to assess the learners' performance in an L2 writing task.

One of the most significant contributions to SLA, in general, and to L2 writing in particular, is the volume by Wolfe-Quintero et al (1998). This research synthesis reviews 39 L2 writing studies to address mainly two issues: 1) How do the measures utilized in these studies evaluate L2 writing? 2) Which are the best measures for L2 writing development? These authors focus their attention on measures of fluency, accuracy, and complexity. After reviewing each study and detailing the assessment measures utilized in these studies, the authors propose a number of measures that appear to hold higher validity rates. For fluency, words per T-unit, words per clause, and words per error-free T-unit were proposed. Complexity was further sub-divided into grammatical (clause per T-unit and dependent clause per clause) and lexical complexity (word types per total number of words and sophisticated word types per word types). Finally, two measures are proposed for accuracy: error-free T-units per T-unit, and errors per T-unit.

In light of the statistical analysis of the thirty-nine studies, L2 proficiency seems to significantly correlate with increases in syntactic complexity only when proficiency is defined by programme level.

In another research synthesis, Ortega (2003) analyses 27 studies that investigated L2 writing at the college level. Twenty-one of these studies were cross-sectional and six longitudinal. The author set out to explore three main issues: first, the impact of the instructional setting and proficiency criteria on the mean values and range of a given syntactic complexity measure across the twenty one cross-sectional studies; second, differences in performance by two different proficiency groups for a given syntactic complexity measure across studies; finally, the author was interested in evaluating the amount of change when gains in performance relative to length of observation are compared across longitudinal studies.

Ortega (2003) focuses on the six most common syntactic complexity measures across studies. She identifies three measures of length of production, one measure of amount of coordination, and two measures of amount of subordination. The analysis of the data in the twenty-seven studies showed significant results. First, ESL learners produced writing of more syntactic complexity than that produced by FL learners. Second, studies that set proficiency level based on holistic ratings showed a more homogeneous range of results across groups. Third, some critical magnitudes were established based on the results achieved for between-group differences. Finally, three months of instruction result in little difference in mean length of T-unit across ESL groups and even less across FL groups. After one year, changes may be greater (Ortega 2003: 512).

Taking into account the above review and to test the validity of the Process model of motivation in the context of L2 writing tasks, I am going to investigate the relationship between task motivation, as measured in this model, and five syntactic complexity measures in the participants' L2 writing: number of words (NW), number of t-units (NTU), proportion of error-free t-units (EFTU), number of words per t-unit (NWTU), and lexical variety (LV). NW and LV, fluency and complexity measures are used by Kormos and Dörnyei (Kormos and Dörnyei 2004) in their investigation of oral argumentative tasks. NTU, EFTU, and NWTU are common measures for fluency and accuracy in the L2 writing research field as pointed out by Wolfe-Quintero et al (1998). While there are several definitions of the term t-unit in the field of L2 writing,

the current study will define it as a minimal, independent, terminable clause, which has all modifying phases attached to it (Larsen-Freeman and Long 1991).

The Ubber Index was utilized to determine LV. This formula is used in Kormos and Dörnyei (2004):

Ubber Index: (log tokens)$^2$ / (log tokens - log types)

The following are the research questions for which I attempt to find an answer in this study:

1) Is there a significant correlation coefficient between the task motivation scores as measured in this study and any of the five syntactic complexity assessment measures under investigation?
2) Is there a significant difference in perfomance in any of the five syntactic complexity measures across groups?

## 4. Method

Participants: Sixty-five participants took part in this study and completed all its parts. Participants were both male and female and all were enrolled in the Spanish foreign language program at Georgetown University in Washington, D.C. as undergraduate students. Thirty-two attended second year Spanish language classes and thirty-three were enrolled in third year Spanish classes.

Materials and scoring procedures. The materials and scoring procedures used in the present study are detailed below:

Participants were handed a sheet with instructions to write a semi-guided writing activity in Spanish. Instructions are shown below:

> Write a single, continuous short story in the past about what you think happened in the comic strips below. Not only narrate the events but also describe the characters and include dialogue for Mafalda and her mom. For example, write about what Mafalda and her mom are doing, when they are doing it, what they are wearing, what they are saying, and, in the case of Mafalda, what she is thinking. Make sure to follow the strips and provide the necessary dialogues for the dialogue bubbles but do not write on the strips. Use transition words to integrate everything into the narrative based on the combined events in the three comic strips. Your story should be approximately one page in length. TRY TO BE AS CREATIVE AS POSSIBLE! THANKS.

Language motivation questionnaire: 45 items on a 7 point Likert-type scale (from Strongly agree to Strongly disagree). This questionnaire was adapted from Dörnyei and Kormos (2004). These items tapped into Integrativeness, Incentive value of learning Spanish, Course attitudes, Linguistic self-confidence, Language use anxiety, task attitudes, and Willingness to communicate (WTC). In this preliminary analysis, I will only consider task motivation.

The scoring procedure for the motivation questionnaire is as follows: The scoring range went from 10 (strongly disagree) through 70 (strongly agree). This order was inverted for negatively formulated questions, that is, 10 (strongly agree) through 70 (strongly disagree).

Structure of the study and procedure. The present study involved 65 L2 learners of Spanish. Participants were given a series of comic strips without captions and were asked to write a story about what they thought had happened in the comic strips. Five syntactic complexity measures were used to evaluate their writing: number of words (NW), number of t-units (NTU), proportion of error-free t-units (EFTU), number of words per t-unit (NWTU), and lexical variety (LV). With previous permission granted by the instructors of the class, the study was carried out during one class time period. First, participants did the semi-guided writing task for which twenty five minutes were allotted. Then, they filled in the motivational questionnaire taking as long as they needed. Several motivational variables were tapped into through this questionnaire: Integrativeness, Incentive value of learning Spanish, Course attitudes, Linguistic self-confidence, Language use anxiety, task attitudes, and Willingness to communicate (WTC). However, in this preliminary analysis only task attitudes were assessed for the reasons mentioned above.

Analysis. In order to find an answer for research question (RQ) 1, I ran a correlation analysis between task motivation and the five linguistic variables investigated in the participants' L2 writing: NW, NTU, EFTU, NWTU, LV. To address RQ 2, participants were divided in High and Low task motivation groups based on their responses to the task motivation items in the questionnaire. Groups were established taking into consideration the lowest and highest task motivation score, the mid-score between them was the cut-off point. In this manner, 25 participants were assigned to the Low task motivation group, while the remaining 40 participants were assigned to the High task motivation group. Once both groups were established, Independent samples *t*-test were run to find out if there were significant differences between the two groups in any of the five linguistic variables under investigation.

## 5. Results

RQ1) Is there a significant correlation coefficient between the task motivation scores as measured in this study and any of the five syntactic complexity assessment measures under investigation?

For RQ1, correlation analyses were run to investigate if there were any significant relationships between any of the linguistic variables (NW, NTU, EFTU, NWTU, LV) and task motivation scores.

In figure 1 below, the correlation matrix for task attitudes and all the linguistic variables is shown:

In figure 1, the results of the correlation analyses for task motivation and each of the linguistic variables are presented. This matrix table shows that there are several significant correlation coefficients between the variables concerned. Task motivation holds a linear relationship with NW (r = .631, p = .000), NTU (r = .566, p = .000), and LV (r = .471, p = .000).

Therefore, the relationship between task motivation and these linguistic variables tends to be linear and positive. In simple words, the more task motivation, the more number of words, the more t-units, and the more lexical variety can be found in the participants' L2 writing.

**Figure 1**
Correlation matrix

|  |  | TaskMot | NW | NTU | EFTU | NWTU | LV |
|---|---|---|---|---|---|---|---|
| TaskMot | Pearson Correlation | 1 | .631(**) | .566(**) | .187 | -.141 | .471(**) |
|  | Sig. (2-tailed) | — | .000 | .000 | .135 | .262 | .000 |
|  | N | 65 | 65 | 65 | 65 | 65 | 65 |
| NW | Pearson Correlation | .631(**) | 1 | .713(**) | .553(**) | .055 | .886(**) |
|  | Sig. (2-tailed) | .000 | — | .000 | .000 | .661 | .000 |
|  | N | 65 | 65 | 65 | 65 | 65 | 65 |
| NTU | Pearson Correlation | .566(**) | .713(**) | 1 | .467(**) | -.058 | .612(**) |
|  | Sig. (2-tailed) | .000 | .000 | — | .000 | .644 | .000 |
|  | N | 65 | 65 | 65 | 65 | 65 | 65 |
| EFTU | Pearson Correlation | .187 | .553(**) | .467(**) | 1 | .183 | .716(**) |
|  | Sig. (2-tailed) | .135 | .000 | .000 | — | .143 | .000 |
|  | N | 65 | 65 | 65 | 65 | 65 | 65 |
| NWTU | Pearson Correlation | -.141 | .055 | -.058 | .183 | 1 | .102 |
|  | Sig. (2-tailed) | .262 | .661 | .644 | .143 | — | .418 |
|  | N | 65 | 65 | 65 | 65 | 65 | 65 |
| LV | Pearson Correlation | .471(**) | .886(**) | .612(**) | .716(**) | .102 | 1 |
|  | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .418 | — |
|  | N | 65 | 65 | 65 | 65 | 65 | 65 |

** Correlation is significant at the 0.01 level (2-tailed)

The answer to RQ 1 is therefore positive regarding NW, NTU, and LV.

RQ2) Is there a significant difference in perfomance in any of the five syntactic complexity measures between High and Low motivation groups?

In figures 2 and 3 below, the descriptive statistics and the independent samples tests are found. As figure 2 shows, the High task motivation group is made up of 40 participants, whereas the Low motivation group contains the remaining 25 participants. The mean scores for each group in every task are also shown.

The results for the independent samples $t$-test shown in figure 3 reveal that the High/Low task motivation groups performed significantly different in regards to NW ($t$=-4.261, $p$=.000), NTU ($t$=-4.675, $p$=.000), and LV($t$=-2.631, $p$=.011). Therefore, these results confirm what seemed to be large differences in main scores between the groups, as shown in figure 2.

It is thus possible to answer RQ2 in positive terms regarding NW, NTU, and LV.

**Figure 2**
Descriptive statistics for Independent samples test

|  | tasklevel | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| NW | 1.00 | 25 | 166.8400 | 44.36936 | 8.87387 |
|  | 2.00 | 40 | 228.1250 | 62.68447 | 9.91129 |
| NTU | 1.00 | 25 | 13.8000 | 4.11299 | .82260 |
|  | 2.00 | 40 | 18.2750 | 3.51544 | .55584 |
| EFTU | 1.00 | 25 | 49.4268 | 20.82639 | 4.16528 |
|  | 2.00 | 40 | 54.9808 | 21.89071 | 3.46123 |
| NWTU | 1.00 | 25 | 12.3828 | 2.33848 | .46770 |
|  | 2.00 | 40 | 14.3025 | 10.71565 | 1.69429 |
| LV | 1.00 | 25 | 317.3940 | 96.18602 | 19.23720 |
|  | 2.00 | 40 | 388.9663 | 112.68773 | 17.81749 |

**Figure 3**
Independent samples test. High/Low motivation groups

|  |  | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | | | | | | | | | 95% Confidence Interval of the Difference | |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | | Lower | Upper |
| NW | Equal variances assumed | 1.69 | .198 | -4.26 | 63 | .000 | -61.2850 | 14.38251 | | -90.0261 | -32.5438 |
|  | not assumed | | | -4.60 | 61.92 | .000 | -61.2850 | 13.30335 | | -87.8786 | -34.6913 |
| NTU | Equal variances assumed | .387 | .536 | -4.67 | 63 | .000 | -4.47500 | .95716 | | -6.38774 | -2.5622 |
|  | not assumed | | | -4.50 | 45.13 | .000 | -4.47500 | .99279 | | -6.47442 | -2.4755 |
| EFTU | Equal variances assumed | .000 | .997 | -1.01 | 63 | .315 | -5.55395 | 5.47927 | | -16.50340 | 5.39550 |
|  | not assumed | | | -1.02 | 53.02 | .310 | -5.55395 | 5.41568 | | -16.4163 | 5.30840 |
| NWTU | Equal variances assumed | .813 | .371 | -.880 | 63 | .382 | -1.91970 | 2.18077 | | -6.27762 | 2.43822 |
|  | not assumed | | | -1.09 | 44.74 | .281 | -1.91970 | 1.75766 | | -5.46036 | 1.62096 |
| LV | Equal variances assumed | .624 | .433 | -2.63 | 63 | .011 | -71.5722 | 27.20396 | | -125.9350 | -17.2094 |
|  | not assumed | | | -2.730 | 57.01 | .008 | -71.5722 | 26.22085 | | -124.0782 | -19.0662 |

p < .05

## 6. Discussion

The present study investigated the relationship between task motivation, as defined in Dörnyei (2000), Dörnyei and Ottó (1998), and five linguistic variables found in participants L2 writing. A semi-guided writing task was designed to elicit the data that would be analyzed for NW, NTU, EFTU, NWTU, and LV. These syntactic complexity measures are commonly used in the L2 writing literature and have been argued to be valid measures for L2 writing development (Wolfe-Quintero et al. 1998).

Dörnyei and associates' Process model of motivation focuses on the tasks carried out in the L2 classroom. In this context, it could be said that tasks are the minimal units around which motivation evolves. Furthermore, Dörnyei (2000) and Dörnyei and Ottó (1998) argue that motivation to learn a second or foreign language is not static, but that it changes along a continuum. Therefore, motivation has different phases along which it may change.

Due to the micro perspective that it presents, this model underscores tasks attitudes and motivation as the level at which motivation should be investigated. However, only oral argumentative tasks have been tested so far (Dörnyei 2002; Dörnyei and Kormos 2000, Kormos and Dörnyei 2004) with complex but positive results for the motivational variables. In the present study, I have presented results for task motivation, since this variable could be considered as one of the foundations of the model. Dörnyei and Kormos (2000) discuss the important role of task motivation in terms of acting as a filter. In other words, if the learners have good attitudes toward the task, their performance seems to follow regular patterns. On the contrary, if the learners hold negative attitudes toward the task, their performance appears to be random. Along the same lines, Kormos and Dörnyei (2004: 10) subdivide participants into " 'high-task attitude' (the upper half of the sample) and 'low-task attitude' (the lower half of the sample)" to run correlation analysis between motivational and linguistic variables. Results showed linear relationships at different levels that made the authors conclude that task motivation or attitudes toward the task seemed to be a crucial factor in determining further performance.

Results in the present study go along with the previous findings. Participants' attitudes toward the task surface as a very important factor in their L2 writing performance. Task motivation is significantly correlated with NW, NTU, and LV. In a nutshell, the better the attitudes toward the task, the more words, the more t-units, and the more lexical variety produced. In addition, Kormos & Dörnyei (2004) concluded that, in general, motivation influenced the quantity of speech produced, rather than the quality. Results reported here deviate slightly from those previous findings, since LV is a quality measure. In the present investigation, both quantity and quality of L2 writing produced are shown to be significantly correlated with measures of task motivation.

Task attitudes have been shown to be linearly correlated with linguistic measures in the L2 writing produced. It is therefore reasonable to state that attitudes toward the task or task motivation, as has been termed in this study, are a very important factor that can affect the linguistic outcome. Results for the *t*-test analysis further confirm this fact, since there are significant differences in performance bet-

ween High and Low task motivation groups. As with the correlation analyses, NW, NTU, and LV are the measures in which those differences are significant. These measures assess fluency and complexity, or in Dörnyei's terms, quantity and quality of writing.

Kormos & Dörnyei (2004) subdivided their sample into High and Low task motivation groups and found that the number of arguments produced orally correlated significantly with a complex of motivational variables. Hence, results presented here do not contradict previous findings and task motivation, the only motivational variable investigated, holds a significant linear association with three linguistic variables.

Finally, no significant correlation or difference in performance between the two task motivation groups have been found involving the other two linguistic variables concerned, EFTU and NWTU. To account for this fact, participants' proficiency level should be taken into consideration, given its possible influence in the outcome of the activity.

## 7. Limitations and future research

Two main limitations need to be mentioned. First, we have shown several significant correlation coefficients between task motivation and linguistic variables. However, this does not imply causation. Correlations test for possible linear relationships amongst variables. Positive linear relationships have been proven to exist between the variables as defined in this study, i.e. when the scores for one variable increase, the scores for the other variable increase as well. Second, participants' proficiency level could have had a bearing on the results achieved, but this variable has not been investigated here.

Given that results for the main motivational variable in the model have been positive in the context of the Process model, all the motivational variables utilized by Dörnyei and Kormos should be addressed in future research. Furthermore, proficiency level should also be added to the equation, since it could be a possible explanation for some of the results achieved.

## 8. Conclusion

In the present study I have contributed to the growing L2 motivation literature. I have shown that the model proposed by Dörnyei and associates, thus far only tested with oral argumentative tasks, has the potential for accounting for performance in other types of tasks. I have investigated the main variable's relationship with five linguistic variables in an L2 writing task. Not only have three of the linguistic measures been proven to be significantly related to the participants' motivation regarding this task, but also High and Low task motivation groups have been shown to significantly differ in linguistic outcome.

As mentioned above, future studies should address the remaining motivational variables and their relationship with different aspects of L2 performance.

## 9. References

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