INNOVATION IN LANGUAGE LEARNING International Conference

Learning German as a Foreign Language: An Empirical Investigation of Motivation Based on Self-Determination Theory

Konstantinos Chatzidimou[1]

Aristotle University of Thessaloniki, Greece[1]

Abstract

The role of motivation in L2 learning is widely acknowledged. Hence, motivation in foreign language learning has become a focus of interest of several researches and various motivation theories have been provided. One of the leading theories within the category of the cognitive approaches in motivation is the self-determination theory (Deci & Ryan, 1985; Dörnyei, 2003; Noels et al., 2003). Starting from this point, the present study explored the motivation of Greek learners of German as a foreign language in the light of self-determination theory. 152 students of the School of German Language and Literature of the Aristotle University of Thessaloniki participated in the questionnaire study. Its research tool was based on previous similar investigations in international settings (Noels et al., 2003). The study explored aspects of intrinsic and extrinsic motivation, as well as amotivation and basic orientations in language learning. Perceived competence and anxiety were also investigated. Exploratory factor analysis of the items of the questionnaire and correlations among the motivational subscales were carried out in order to examine various parameters of self-determination in the Greek context of foreign language learning.

Keywords: *Foreign Language Learning; Motivation; Self-Determination Theory; German as a Foreign Language*

1. Introduction

Motivation has been widely acknowledged as a crucial factor in academic learning and thus in learning a foreign or second language (L2). Having been originally initiated in Canada by social psychologists about fifty years ago, L2 motivation has become a central issue in research on foreign language learning (FLL). This has led to various theoretical approaches and motivation theories, such as Gardner's [1] motivation theory, self-determination theory (SDT), attribution theory, and goal theories [2, pp. 7-9].

This paper focuses on SDT, which was established by Deci and Ryan [3] and has been extensively studied and further developed in recent years by Noels [4] and others [5]. In the framework of SDT, two general types of motivation are distinguished: intrinsic motivation (IM) and extrinsic motivation (EM), which lie along a continuum of self-determination.

IM, established upon "innate needs for competence and self-determination" [3], [5, p. 38], can be analyzed into three subtypes: IM-Knowledge, IM-Accomplishment and IM-Stimulation [6]. All of these subtypes of IM have as a common element the satisfying emotions caused by a self-initiated activity [5, p. 38]. On the other hand, EM, connected to actions performed "to achieve an instrumental goal, for example earning a reward or avoiding a punishment" [5, p. 39], can be divided in external regulation, introjected regulation and identified regulation [6], according to the level of self-determination (from the lowest to the highest level) [5, p. 39]. The situation in which someone has no intrinsic or extrinsic reason for executing an activity, in our case learning a FL, is described as "amotivation" [3], [5, p. 40].

Furthermore, following the perspective of Noels et al. [5], we included in our study aspects such as the travel, friendship and instrumental orientation in FLL, described by Clément and Kruidenier [7], in order to investigate their relations to the motivation types described above, suggested by Deci and Ryan [3] and Vallerand and his colleagues [6]. Finally, two variables that have been proved to be related to IM and EM [5, p. 43] were included in our study: perceptions of competence and anxiety.

2. The Study

Following a previous, preliminary study of ours [8], we designed a questionnaire study in order to examine SDT in learning German as a FL in the Greek educational context. Some basic aspects of this research will be presented below.

2.1 Participants

The learner population investigated in our study was undergraduate students of the School of German Language and Literature of the Aristotle University of Thessaloniki (Greece). 152 students participated in the research, 84.2% of which were women. 30.5% of the participants were first-year students, 22.5% were second-year students, 5.3% were third-year students, 17.2% were fourth-year students, 13.2% were fifth-year students, and 11.2% were in their sixth or higher year of studies. In order to facilitate the statistical analysis, four groups were formed: first-year students (30.5%), second and third-year students (27.8%), four and fifth- year students (30.5%), and sixth or higher year students (11.3%).

Their age varied from 18 to 58 years, with an average age of 22.4 years. Their average amount of years of learning German was 7 years, whereas 6% of them already had another university degree. Regarding their level of competence in German, according to their self-assessment, 18.4% of them placed themselves at a level up to B1+, 31.6% at B2 and B2+, and 49.3% at C1 or higher.

As far as the participants' competence in other FLs is concerned, 75.5% spoke one additional FL, 17.9% spoke two FLs, 4% spoke three, and 2.6% spoke no other FL than German. These languages were: English (96.7%), Russian (11.9%), Spanish (4.6%), Italian (4%), French and Turkish (2% each), Dutch, Albanian and Japanese (0.7% each). In order to facilitate the statistical analysis, two wider groups were formed: students who spoke one or no other FL (78.1%) and students who spoke two or three further FL (21.9%).

2.2 Instrument

The research instrument used in this study was a questionnaire specifically designed for the study. The questionnaire was based on the study of Noels et al. [5] on SDT and more particularly on the "Language Learning Orientations Scale – Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales (LLOS-IEA)" provided there. The latter was modified, in order to be adjusted to the students who were investigated. Thus, the questionnaire examined: external regulation, introjected regulation, identified regulation (which consisted of three items each), IM-Knowledge, IM-Accomplishment, IM-Stimulation (three items each), amotivation (three items), perceived competence (five items), anxiety (three items), travel orientation (three items), friendship orientation (four items) and instrumental orientation (three items). Overall, the questionnaire contained 39 five-point Likert scale items and seven background questions.

2.3 Data Collection and Analysis

The data collection was conducted during spring semester 2019. The students were informed that their participation was voluntary and that the survey was anonymous. There was no time limit in filling out the questionnaire. Students whose first language was German were excluded from the survey.

The analysis and the elaboration of the questionnaire data were conducted with the use of the statistical programme SPSS 22.0.

2.4 Results

Due to space limitations, only the descriptive results of the motivational variables of the questionnaire are presented below, as well as the results from the correlations among the independent variables and the dependent ones. Further statistical analysis will be conducted and its results will be presented in a future publication.

Table 1 presents a comprehensive summary of the results concerning the index for internal consistency (Cronbach's Alpha), the mean values and the standard deviation of the two general types of motivation (EM, IM), their six subtypes, amotivation, variables that have been shown to be connected to IM and EM (perceived competence, anxiety) [5, p. 43] and orientations toward L2 learning (travel, friendship, instrumental orientation).

Table 1. Internal consistency and mean values of the motivational subscales

Variables	Cronbach's Alpha	Mean	Std. Deviation
Extrinsic Motivation	0.747	3.12	0.67
External Regulation	0.583	2.97	0.81
Introjected Regulation	0.672	2.32	1.01
Identified Regulation	0.736	4.08	0.87
Intrinsic Motivation	0.880	3.79	0.80
IM_Knowledge	0.786	3.64	0.96
IM_Accomplishment	0.873	3.86	0.97
IM_Stimulation	0.699	3.88	0.89
Amotivation	0.917	1.15	0.58
Perceived Competence	0.849	3.52	0.73
Anxiety	0.764	2.86	1.03
Travel	0.583	3.84	0.86
Friendship	0.905	2.86	0.74
Instrumental Orientation	0.591	3.95	0.84

The Cronbach's alpha internal consistency coefficient rendered rather satisfactory levels for most of the multi-item scales. Only few subgroups did not reach the recommended 0.70 threshold, the difference being a few points. Thus, it could be argued that the questionnaire has delivered data of rather satisfactory consistency.

As shown in Table 1, the students of the study seemed to be more intrinsically (M=3.79) than extrinsically motivated (M=3.12). However, identified regulation, as subtype of EM, scored the higher mean value (M=4.08) of all six subtypes of EM and IM. The two other subtypes of EM, however, had lower mean values than the subtypes of IM, thus concluding that knowledge and the feelings of accomplishment, enthusiasm and satisfaction play a significant role in the students' learning of German. Amotivation, on the other hand, did not seem to be an influential factor (M=1.15); the participants of the research appeared to have reasons for learning German and are not expected to quit the activity soon [5, p. 40].

Regarding the three orientations examined here (travel, friendship and instrumental scale) [6], the students' responses indicated a strong agreement with the proposed reasons for learning German that were included in the instrumental scale (M=3.95). The travel scale also scored rather high (M=3.84), whereas friendship did not (M=2.86).

Overall, the motivational subscales were placed with the following order: identified regulation (M=4.08), instrumental orientation (M=3.95), IM-Stimulation (M=3.88), IM-Accomplishment (M=3.86), travel orientation (M=3.84), IM-Knowledge (3.64), external regulation (M=2.97), friendship orientation (M=2.86), introjected regulation (M=2.32) and amotivation (M=1.15).

The students' self-perception of competence in German appeared rather high (M=3.52), while feelings of pressure or tension in learning German (anxiety) seemed to be at an average level (M=2.86).

The results of the correlation analysis between the independent and the dependent variables revealed the following:

- Male students appeared to have a higher self-perception of competence in German than female students (t=3.42, df=148, p=0.001).
- Students who were in their fourth or fifth-year of studies had higher self-perception of competence in German (F=8.485, p=0.000) and stated to have feelings of anxiety to a lesser extent than first-year students (F=2.990, p=0.033).
- Students who already had another university degree had higher self-perception of competence in German (t=2.007, df=147, p=0.047) and had a lower mean value in identified regulation (t=-2.773, df=149, p=0.024), which is regarded as the "most self-determined form of EM" [5, p. 39].
- Students who spoke one or no other FL than German had a higher level of external regulation than students who spoke two or three further FL (t=2.516, df=146, p=0.013). This type of EM has the lowest level of self-determination [5, p. 39].
- Students with a higher level of competence in German scored a higher mean value concerning IM-Knowledge (F=3.680, p=0.028) and stated a lower level of anxiety compared to the students with a lower level of competence in German (F=9.740, p=0.000).

3. Conclusion

Based on the high ranking of identified regulation and instrumental orientation, the students of the study appeared to have chosen to learn German for personal reasons, given that they seemed to be engaged in the activity "because of its importance for achieving a valued goal" [5, p. 39]. Nevertheless, the students also appeared to find the process of learning German pleasant and satisfying (IM). The satisfaction and the enthusiasm they felt by learning and speaking German played a significant role (IM-Stimulation), as did the "sensations related to attempting to master a task or to achieve a goal" [5, p. 38] (IM-Accomplishment). The next step of the present data analysis would be to examine the inner relations among the motivation subscales through an exploratory factor analysis and to calculate the intercorrelations between IM and EM subtypes in order to explore a possible self-determination continuum.

References

[1] Gardner, R.C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Arnold.

[2] Dörnyei, Z. (2003). Attitudes, Orientations, and Motivations in Language Learning: Advances in Theory, Research, and Applications. *Language Learning, 53*(1), 3-32.

[3] Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.

[4] Noels, K.A. (2001). New orientations in language learning motivation: Towards a model of intrinsic, extrinsic, and integrative orientations and motivation. In Z. Dörnyei & R. Schmidts (Eds.), *Motivation and second language learning* (pp. 43-68). Honolulu, HI: University of Hawai'i Press.

[5] Noels, K.A., Pelletier, L.G., Clément, R., & Vallerand, R.J. (2003). Why Are You Learning a Second Language? Motivational Orientations and Self-Determination Theory. *Language Learning, 53*(1), 33-64.

[6] Vallerand, R.J., Pelletier, L.G., Blais, M.R., Brière, N.M., Senécal, C., &Vallières, E.F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement, 52*, 1003-1017.

[7] Clément, R. & Kruidenier, B.G. (1983). Orientations in Second Language Acquisition: I. The effects of Ethnicity, Milieu and Target Language on Their Emergence. *Language Learning, 33*, 272-291.

[8] Chatzidimou, K. & Sidiropoulou-Lenger, R. (forthcoming). Why and Where Do We Learn a Foreign Language? A Small-scale Investigation of Postgraduate Teacher Students' Perspectives. *Language Teaching Research Quarterly*.