

Certainty and the Linguistic Intervention Program in Foreign Language Learning

Eva Stranovská¹, Silvia Hvozdíková^{2,*}

¹Department of German Studies, Constantine the Philosopher University, Nitra, Slovakia

²Department of English and American Studies, Constantine the Philosopher University, Nitra, Slovakia

*Corresponding author: shvozdikova@ukf.sk

Received September 30, 2014; Revised November 26, 2014; Accepted May 27, 2015

Abstract The purpose of the research study was to investigate the dynamics and the stability of personal variable of certainty in foreign language learning through the tools of the Linguistic Intervention Program - LIP. The research study examined the effect the program had on certainty in foreign language performance as well as durability of the LIP on foreign language performance – one year after the program. The focus was drawn on two kinds of certainty: a) normal certainty I1 and pathological certainty I3. The Linguistic Intervention Program represented a method of active social learning, of self-directed learning, a set of specifically designed techniques and strategies of foreign language learning; for instance: cognitive, relaxation, cooperative, communicative techniques, and the techniques specifically designed for social perception and intercultural communication. The Linguistic Intervention Program emphasized on a natural way of learning foreign language. The research sample included 396 subjects - university students - studying various teaching programs at the University of Constantine the Philosopher in the city of Nitra, Slovakia. The research tool of Certainty-Uncertainty Scale served the purpose. The participating, first, second, and third-year students, enrolled for the seminars of foreign languages for specific academic purposes. The outcomes of the research showed remarkable findings of the variable certainty – normal and pathological; associated with the dynamics and the stability of foreign language performance through the means of the LIP. The results proved statistical significance in I1 and statistically significant higher score in time durability. The examined variable I3 was referred to as a relatively stable characteristic in foreign language performance.

Keywords: *Linguistic Intervention Program, certainty, foreign language*

Cite This Article: Eva Stranovská, and Silvia Hvozdíková, “Certainty and the Linguistic Intervention Program in Foreign Language Learning.” *American Journal of Educational Research*, vol. 3, no. 6 (2015): 753-757. doi: 10.12691/education-3-6-14.

1. Introduction

Intervention plays a significant role in foreign language learning because learning foreign languages is a complex process with a wide spectrum of particular processes, and is deeply individual. Apparently, it is impossible to find two identical individuals as well as it is impossible to find two identical foreign language performances. Human language is characterized as a constantly developing mental process and reflects original unrepeatable human thinking. Thus, investigation of intervention in foreign language learning is an ongoing process encompassing deduction, induction, and detailed research. Recognizably, academic research lacks the investigations in the field of intervention in foreign language learning (Huber, 2003, Chapelle, Robert, 1986). The grounds of the investigation in the current research study was the intervention exercised through the process of the Linguistic Intervention Program emphasizing the variables associated with foreign language development, and eliminating the variables associated with foreign language competence inhibition. One of the examined variables was

the variable of certainty. The current research in the field of psycholinguistics emphasizes examination of the effects certainty has on successful foreign language learning (Liu, 2012, Brown, 2000 and other), examination of the effects tolerance of ambiguity had on language learning together with the investigation of certainty and its effects on syntactical skill – foreign language sentence structure and sentence comprehension (Stranovská et al., 2013).

It was the purpose to investigate the dynamics and the stability of certainty in the process of foreign language learning. Moreover, it was to examine the effects the intervention in the LIP had on experiencing of certainty in foreign language learning of an individual, and the degree of extent into which it was possible to influence the experience of certainty when learning a foreign language. Thus, experiencing of certainty in foreign language learning was the key motivation for the LIP design development. As suggested in the previous research, foreign language learning is composed from more components and it is learner’s task to acquire how the components vary, how compatible, coordinated and arranged they are, and how in what arrangement they are produced. Language structures are viewed in more precise fashion and their design may be of both, language or

personal dimensions. Personal experiencing of certainty, either normal or pathological certainty, is influential in L2 performance and L2 perception. Furthermore, two levels of certainty were examined: a) normal certainty, b) pathological certainty, and their dynamics in foreign language learning through the LIP. Moreover, the purpose was to prove the stability of foreign language development in time. It was the centre of attention to find out whether the variable of certainty proved to be a dynamic or a stable factor in foreign language learning; whether it increases or decreases after the method of the LIP was utilized.

1.1. The Variable of Certainty and Tolerance of Ambiguity

Most of the foreign language speakers try to use the language units and the language means they feel certain in, they feel self-confident to perform. Certainty is such a mental condition of an individual when the process of hypotheses verification and analyses development are accomplished; the status referred to as being in the process of self-reflection and reflection of environment; such an individual is satisfied with information received. Kováč (1969) refers to certainty - uncertainty as not only a status but also a mental process when probability of certain results is known into the highest possible degree. Mental certainty is a personal trait of such individuals who appear to be self-confident, does not hesitate about decisions and intentions, and demonstrates confidence in social situations. Kováč (1969) considers human personality as the essential source of certainty and uncertainty. Experiencing of certainty – normal, abnormal and uncertainty – normal increased and pathological depends on the complexity of cognitive situation.

The need for certainty and security is one of the most frequently desired aims in foreign language learning, however, individual progress of a foreign language speaker may get into contradiction with the desired aims. Apparently, in order to develop, every foreign language speaker needs to take certain extent of risks.

Liu (2012) describes the factor of risk-taking as one of the influential factors in the process of foreign language learning. Several investigations showed that the factor of risk-taking positively influenced foreign language performances of university students. The students who took risks were willing to participate in mutual conversations more often. The risk-taking factor in foreign language learning refers to ability of individuals to get free from using known language means, to experiment with language phrases, sentence structures and develop linguistic creativity. Risk-taking in linguistic application is an indicator of linguistic self-confidence. The risk-taking factor correlates with the variable of tolerance of ambiguity in foreign language, as well as with the variable of certainty in foreign language performance.

Tolerance of ambiguity refers to the ability of individuals, in social groups or individually, to perceive and process information about uncertain stimuli and situations or about situations considered generally as uncertain, when it is confronted with a set of uncertain, complex or incongruent keys. Tolerance of ambiguity in foreign language learning represents one of the learning styles, one of the abilities of individuals to tolerate ambiguity, to create cognitive structures. Moreover, it is

the ability to work individually with new impulses without frustration. Bar – Tal (1999) refers to cognitive structuration as an accompanying process of getting certain by selecting more useful pieces of information, thus, when an individual gradually processes information it assimilates in cognitive structure and becomes useful. Neuberg and Newsom (1993) consider cognitive structuration as a means of understanding of relationships in this world and refer to it as relatively unconstrained and automatic. When individuals hold to the same rigid cognitive structures, then they use the same constructs and make the same mistakes. Contemporary research proved that individuals with a higher degree of cognitive structuration inclined to have better communication skills, and they are also able to cope with stress and mental burdens better (Burger, 1993; in: Výrost, Ruisel, 2000).

Mostly, in context of foreign language learning it is possible to get ambiguous and to get new impulses, in studying lexical units of foreign language because one word may have more connotations or when studying grammatical structures having more rules and exceptions. Brown (2000) points out that higher degree of ambiguity tolerance or high degree of certainty may not only refer to indicators but also to inhibitors. It refers to the individuals who manifest very high degree of certainty or tolerance of ambiguity, which may inhibit them to create sensible explanations, rules and their system.

1.2. The Linguistic Intervention Program

Generally, there are great numbers of intervention programs, however, there are not many, which emphasize strengthening of the following variables: linguistic competence, linguistic and intercultural sensitivity, tolerance of ambiguity in foreign language – the ability to create cognitive structures, need for structure, self-esteem, certainty in foreign language performance, and strategies in foreign language learning. The LIP introduces a post-communication method optimizing the above mentioned variables referring to development of the variables. Post-communication method implies an eclectic interconnection of a wide variety of theoretical approaches, strategies and methods in foreign language instruction and learning, for instance, project learning, student-oriented teaching, active learning, self-directed learning, interactive teaching, cooperative learning, etc. The common aims of the approaches include foreign language comprehension, cultural authenticity in language performance, and natural communication in foreign language.

The program was entitled intervention program because intervention, defined here as a technique, or an influence on an individual directed into a desired change or interruption or reinforcement of a previous process, was implemented in the program. Intervention is viewed here as reinforcement, strengthening or improvements of the ways an individual learns a foreign language, how they identify with the language how they self-evaluate or which foreign language learning strategies they choose when learning a foreign language.

The LIP represents a form of active social learning and self-directed learning. The basis of the program were build on great amount of foreign language activities exposure on the program participants and the support of the participants' insights into foreign language situations and

training of new forms of behavior, experiencing, evaluation, and emotional experiencing. In reality the process of learning in the program was happening hic et nunc, thus open social communication was strengthened; the participants sat in a circle without any barriers representing latent intervention of certainty. The process of the program was divided into three phases: the warm-up phase – the program participants got acquainted with a new situation, they tried to get certain in the situation, the following was the production phase – the participants solved thematically selected problems and tasks, they were exposed to certain amount of new language tied to explanations, the information parts were interconnected with the experiencing parts; the last was the calming down phase – it was the phase of evaluation; the emphasis was paid on the emotionally saturating themes and to the transfer of newly gained experience.

Accordingly, Popelková (2003) points out the significance of calming down activities in learning referring to the significance of relaxation and evaluation in the process.

2. Materials and Methods

2.1. Participants

The sample included 396 daily second year university students of various teaching programs at the University of Constantine the Philosopher in the city of Nitra, in Slovakia, who enrolled for the selective seminars of Foreign Language for Specific Academic Purposes. The average age of the participants was 20, 5 years. The average length of exposure to the language was 9 years and the level of proficiency was B1, B2 (according to Common European Frame of Reference). Respondents were divided into two experimental groups as follows: the experimental group 1 - ESI – included students of natural sciences teaching programs, the experimental group 2 – ESII – included students of social sciences, divided into educational and social studies teaching programs. The study was conducted throughout the academic years 2011–2014.

2.2. Instruments

2.2.1. Certainty – uncertainty Scale

The extent of certainty or experiencing of certainty of the research subjects after the LIP was exercised was measured by the Scale of Certainty-Uncertainty (Kováč, 1969). The instrument for data collection and data processing and analyzing is an original scale examining extent of certainty – uncertainty in 5 degrees, as well as it examines certainty – uncertainty as a personal trait of individuals referring to the mental behavior regulation in inner mental connections – certainty as a constant status. The scale measures inter-psychological connections referring to certainty – uncertainty as a situational status. The purpose of the study was to examine whether certainty as a constant personal trait may get dynamic when influenced by the applied intervention.

The scale consists of 54 statements and respondents decide between two possible alternatives. Respondents' choices are measured within the scale of 5 degrees of

certainty-uncertainty. The current research study focused on the two following degrees: a) I1 – normal certainty, b) I3 – pathological certainty.

2.3. Procedure

The procedure for the research study was the following: LIP development, selection of experimental and control groups, conducting of LIP research, pre-measurement and post-measurement, statistic processing of outcome data, outcome data analyses and conclusions. Structure of each individual lesson, all together 12 lessons, within the LIP was as follows:

0. Introduction of the program, work with expectations and anxieties, first measuring.

1. Self-perception, foreign language and identity

2. Self-perception, self-esteem, foreign language and identity

3. Self-perception, self-esteem, foreign language and identity

4. Non-verbal communication, intercultural communication

5. Non-verbal communication, intercultural communication

6. Verbal communication, intercultural communication, speech acts

7. Verbal communication, intercultural communication, speech acts

8. Solving of everyday and conflict situations, speech acts

9. Solving of everyday and conflict situations, speech acts specific language development

10. Solving of everyday and conflict situations, speech acts, specific language development

11. Feed-back, second measuring.

One year after the LIP was applied the third measuring was carried out. After the three measurements were carried out, statistical processing of the outcome data, data analysis, and results interpretation followed.

3. Results

One year after the program, there were statistically significant scores found in the category I1 in both research groups comparing the first measurement and the last measurement carried out after one year. However, comparing the data taken from the final measurement and the measurement taken after one year, there were no statistically significant differences found in the variable I1.

In the variable I3 there were certain statistically significant differences found out in direction to lower pathological certainty between the first and the third measurement as well as between the second and the third measurements in both experimental groups of participants.

Figure 1 displays statistically significant increase of values in the category I1 – normal certainty, in all the examined groups of participants ($p=0.001$, $p=0.002$). There was no significant difference between the first and the third measurements found out in the variable I3 – pathological certainty in both groups of the students. Moreover, the Figure 1 displays the differences between the first and the second measurements in the control group, in which the program was not utilized. No statistical

significance was found between the first and the second measurements in all degrees of certainty.

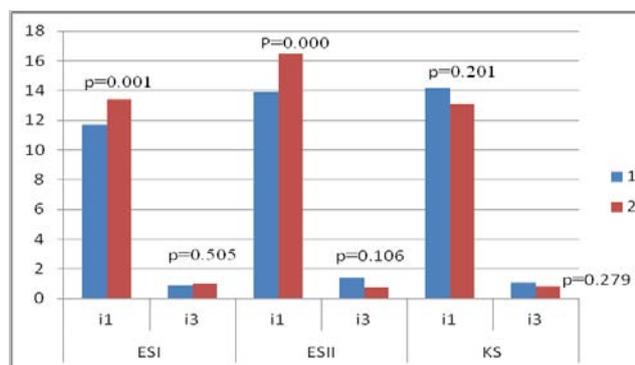


Figure 1. Statistically significant differences in the variable of certainty as found between the measurements No. 1 (blue) and No. 2 (red colour)

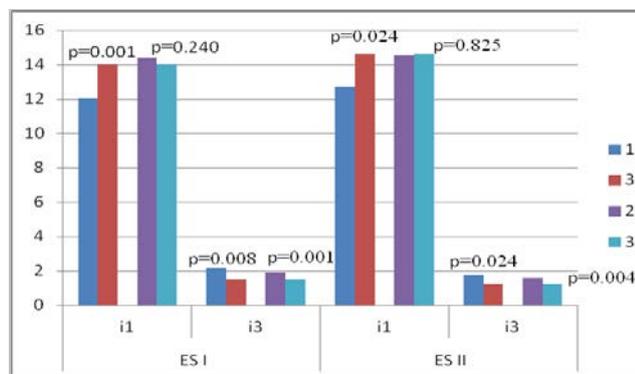


Figure 2. Statistically significant differences in the variable certainty as found in the measurements No. 1, No. 2 and No. 3

4. Discussion

Apparently, the purpose of the research study was to examine the dynamics and the stability of certainty in the process of foreign language learning, and thus, to participate in the current psycholinguistic research. The variable of certainty was closely investigated as it occurred in the Linguistic Intervention Program. The emphasis was paid to examining the dynamics and the stability of the variable in the LIP prior to time, specifically, one year after exercising the program. The variable was investigated within the frame of normal certainty and pathological certainty – abnormal expressions of certainty leading to unreasonable expressions of self-presentation, aggression, non-realistic self-perception or self-overestimation. The research questions were raised if certainty was a stable or a dynamic individual characteristic. Based on the questions increase of normal certainty and decrease of pathological certainty within the LIP, the stability of changes prior to time strengthening foreign language learning and identification with the foreign language were assumed.

The results manifested the variable normal certainty as a dynamic characteristic of individuals in the process of foreign language learning while exercising the LIP. Correspondingly, the LIP appeared to be a predictor of the variable of normal certainty in the direction of statistically significant increase of normal certainty. A wide variety of activities within the program simulated various real-life intercultural situations in a friendly group atmosphere.

The students-participants solved specifically designed cognitive or emotional problems, tasks individually or in groups. Furthermore, Kováč (1969) and Sarmány-Schuller (1999, 2001) find the variable of certainty as a situational – interpersonal variable, or personal – intrapersonal variable – referring to certainty experienced in friendly environment as it appeared in the current research. The students-participants evaluated themselves as more self-confident, having higher degree of self-esteem, self-perception, they expressed more sincerely their ideas and opinions and emotions, reduced the feelings inferiority and fear from communication in foreign language. The presented out coming data manifested the connection not only to the simulation of real-life activities exercised in the program but also to the introspective activities and self-perception techniques as exercised in the program. Moreover, the participants were supported to reflect on themselves on their motivation to learn foreign languages and they were allowed to reflect on their foreign language performance, their experience, all through the means of the program. Perception individual strengths and full potentials supported further foreign language development towards the increased degrees of self-confidence in foreign language performance.

In this regard, statistically significant increase of values in the category II - normal certainty, was considered a positive indicator. Moreover, Blatný (2001) found out that persons with high self-confidence are usually characterized as mentally strong and emotionally hard individuals. He also suggested that such individuals often perform dominance, masculine behavior, demonstrate lower empathy towards others, able to maintain wide range of contents in their consciousness and focus their attention on them, they prefer active problem-solving in stressful situations, and tend not to blame themselves. However, the current study referred more to normal certainty as a support of mental resistance in uncertain situations of foreign language communication and elimination of pathological certainty without showing empathy to others.

The aim of the third measurement, carried out one year after the LIP was exercised, was to examine the variable of stability, and to demonstrate statistically significant change in direction of higher normal certainty. The results taken from the initial and the last (after one year) measurements from the groups of the participants studying natural sciences programs showed statistically significant score in I1. There was no statistically significant difference in the examined area between the second and the third measurements, demonstrating durability of the effects of the program in direction of higher normal certainty in all the examined groups of university students.

In the category of Pathological certainty there was statistically significant difference found in direction to lower pathological certainty between the first and the third measurements as well as between the second and the third measurements. Paradoxically, there were no statistically significant differences found in the variable of I3 between the first and the second measurements, and one year after the LIP there were statistically significant differences found between the initial and the third measurements. Apparently, the significance of the score in the I3 variable is the result of general development under the influence of other not considered variable through out the year of lives.

It may as well demonstrate the effects of the LIP in the variable of I3 after certain time. In this sense, the variable of pathological certainty is a stable personal characteristic reflected in social, interpersonal relationships, and does not tend to change under the influence of an intervention lasting 10 meetings of 90 minutes. It requires more time of intervention; at least two semesters, 20 meetings. The ability to achieve stable certainty naturally is tied to higher ability to tolerate, to resist ambivalent social situations (Sarmány Schuller, Gereková, 2003; Stranovská a kol., 2013). Brown (2000) recommends teaching tolerance to ambiguity – intuitive behavior, risk-taking, not searching for rules and structures in every sentence - receiving the tolerance as a part of foreign language learning. To close, the program LIP is considered an effective method of foreign language learning stimulating certainty in foreign language performance.

5. Conclusion

To conclude, the Linguistic Intervention Program showed to be a crucial variable in the research study influencing the dynamics and the stability of certainty – normal certainty, in the foreign language learning process. The Linguistic Intervention Program as applied in the research supported increase of certainty in foreign language performance as it was displayed in the data analysis of certainty increase; it also showed to be durable over one year time after the LIP. Apparently, the variable normal certainty was a dynamic characteristic of foreign language performance and it is possible to train it by the means of the LIP. Moreover, the results provided showed that pathological certainty was relatively stable personal characteristic requiring continuous intervention in order to achieve a change – decrease of pathological certainty, in foreign language performance. Further investigations are planned in the above mentioned field as well as examining certainty in foreign language performance as a predictor of foreign language competence development. As Huber (2003); Müller-Christ and Weßling (2007) suggest intervention in the field of uncertainty and ambiguity of tolerance is very much required. Statistically significant increase of certainty through the means of the LIP is a positive indicator in the process of foreign language development. The Linguistic Intervention Program is considered an effective method of certainty strengthening and tolerance of ambiguity in a variety of problem solving and decision making process in foreign language social situations as presented in the current study.

Acknowledgement

The research study was supported by the Slovak Research and Development Agency under the contract No. APVV-0451-10.

References

- [1] Bar-Tal, Y., "The effect of need and ability to achieve cognitive structure on mundane decision making," *European Journal of personality*, 8. 45-58. 1994.
- [2] Bar-Tal, Y. and Spitzer, A., "The Need and Ability to Achieve Cognitive Structuring: Individual Differences That Moderate the Effect of Stress on Information Processing," *Journal of personality and Social Psychology*. 77 (1). 33-51. 1999.
- [3] Bar-Tal, Y. and Guinote, A., "Who exhibits more stereotypical thinking? The effect of need and ability to achieve cognitive structure on stereotyping," *European Journal of Personality*, 16. 313-331. 2002.
- [4] Blatný, M., "Osobnostné determinanty sebahodnotenia a životnej spokojnosti: medzipohlavné rozdiely," *Československá psychologie*, 48 (6). 371-378. 2001.
- [5] Brown, H. D., *Principles of language learning and teaching* (4th ed.), Longman. Cummins, J., New York, 2000.
- [6] Chapelle, C. A. and Robert, C., "Ambiguity tolerance and field independence as predictors of proficiency in English as a Second Language," *Language Learning*, 36. 27-45. 1986.
- [7] Huber, N., "An Experiential Leadership Approach for Teaching Tolerance for Ambiguity," *Journal of Education for Business*, 79 (1). 52-55. 2003.
- [8] Kováč, D., "Subjektívna neistota-istota v senzoričkom, percepčnom a kognitívnom rozlišovaní," in: *Percepcia v intermodálnom a intramodálnom kontexte, Záverečná správa úlohy X-18-1/1, Ústav experimentálnej psychológie SAV, Bratislava, 1969.*
- [9] Liu, M., "Predicting effects of personality traits, self-esteem, language class risk-taking and sociability on chinese university efl learners' Performance in english," *Journal of Second Language Teaching and Research*, 1 (1). 30. 2012.
- [10] Müller-Christ, G. and Weßling, G., "Widerspruchsbewältigung, Ambivalenz-und Ambiguitätstoleranz: Eine modellhafte Verknüpfung," in: Müller-Christ; Arndt, L.; Ehner, I. (Hrsg.): *Nachhaltigkeit und Widersprüche*, Münster, Lit-Verlag, 2007.
- [11] Neuberger, S. L. and Newsom, J. T., "Personal need for structure: Individual differences in the desire for simple structure," *Journal of Personality and Social Psychology*, 65. 113-131. 1993.
- [12] Popelková, M., *Vplyv dvoch typov sociálno-psychologického výcviku na vybrané interpersonálne a osobnostné premenné*, FFUK, Nitra, 2003.
- [13] Sarmány-Schuller, I., "Neistota-istota / prípad kauzálnej neistoty," in: Sarmány-Schuller, I., Bratská, M., Naništová, E. (Eds.): *Reflexie súčasnej psychológie na Slovensku, Zborník príspevkov IX. zjazdu slovenských psychológov, STIMUL, Bratislava, 1999.*
- [14] Sarmány-Schuller, I., "Potreba štruktúry a schopnosť vytvárania štruktúry ako osobnostné konštrukty," in: Sarmány Schuller, I. (Eds.): *Zborník Psychológia pre bezpečný svet. Psychologické dni 10.-12.9. 2001, Trenčín, 2001.*
- [15] Sarmány-Schuller, I. and Gereková, E., "Vplyv sociálno-psychologického výcviku na schopnosť vytvárania kognitívnej štruktúry," in: *Zborník Práca a jej kontexty-Psychologické dni, Stimul, Bratislava, 2003.*
- [16] Stranovská, E., Munková, D., Munk, M. and Sarmány-Schuller, I., "Cognitive-Individual, Linguistic and Demographic Variables, and Syntactic Abilities in Foreign Language," *Studia Psychologica*, 55 (4). 273-287. 2013.
- [17] Výrost, J. and Ruisel, I., *Kapitoly z psychológie osobnosti*. VEDA, Bratislava, 2000.