

Importance and motivation of learning Estonian language: Perceptions of international students

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ABSTRACT

The purpose of this study is to understand international students' perceptions of the importance of learning Estonian language. Additionally, this study explores the reasons for that perception and identifies which motivational variables have strongest interaction with the perceived importance. Using descriptive analytical strategy and the Chi-square Automatic Interaction Detection (CHAID hereinafter) technique, this study reveals that the majority of respondents believe that learning Estonian language is important not only for friendship with native Estonian speakers, but also for meeting and conversing with a diverse range of people living in Estonia, for appreciating Estonian art and literature, and for future career/employment. Additionally, this study finds that the most significant motivational variable in comprehending the category of the perception of importance is the motive that learning Estonian would boost students' knowledge and education. By elucidating the importance for learning the Estonian language, this study contributes to the literature on international students' motivation to learn the host country's language, enriches academic discourse in not only the language discipline, but also appeals to policymakers who wish to understand the importance of learning the Estonian language from the perspective of students.

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1. INTRODUCTION

Getting international students interested in learning the Estonian language is an issue because there are so many ways in which that knowledge can be put to good use. The absence of apparent avenues to put newly found knowledge into practice gives reasons to look at the issue of motivation. Successful mastery of any subject requires a strong interest in learning. Motivation is the one of the critical aspects in it. The reason for which an individual wants to learn a language explains his or her motivation (Gardner, 1985). Several researchers (Dörnyei, 1990; Gardner, 1985; Ushida, 2005) underline the critical nature of motivating students to acquire a foreign language. In fact, there has been substantial discussion over the reasons that motivate students to study second/foreign languages (Belmechri & Hummel, 1998; Dittal, 2012; Gonzales, 2010; Hernandez, 2006). However, the focus of these studies is on English rather than Estonian language learning. It has been a relatively new phenomenon in Estonia, where English-speaking residents are learning Estonian (Kallaste, Kallas, & Anspal, 2018). For many professions, the ability to speak and understand the Estonian

language is now a need, as well as a badge of honor for members of new social groupings. English-speaking residents are moving to Estonia, and one of the reasons for this is the increase in the number of international students. Estonia's approach toward international students has evolved significantly over the last decade (EKKA, 2018) with international degree students now accounting for 11.6 percent of all students in the country. The increasing number of international students enrolling in Estonian universities demonstrates these foreign talents' eagerness to join to the country's knowledge economy. As a response, one of the strategic priorities in the current period is to attract the best international students to study in the country and to integrate them into the workforce following graduation (EMN, 2019). Institutional efforts have been undertaken to maximize the use of existing resources to achieve this objective. For example, many Estonian universities have included Estonian language lessons into their curriculum in response to concerns about foreign students' employability (Kallaste, Kallas, & Anspal, 2018). In these circumstances, the importance of motivating students to learn Estonian has become paramount. The relevance of English language acquisition for international students is widely discussed in western literature (Dörnyei, 1994; Gardner, 1985; Oxford & Shearin, 1994), but this paper aims to investigate the motivations and reasons for which international students perceive it is important to study the Estonian language. In fact, the goal of this research is to address the question: Is it important for international students to learn Estonian language? If so, why? Additionally, this study intends to explore which motivational variables have the strongest interaction with the perceived importance of learning Estonian.

2. MOTIVATION IN ACQUISITION OF FOREIGN LANGUAGE

Motivation can be thought of as the act of coming up with a reason for doing something (Dörnyei, 1990). Motivation can be viewed through different prisms, including needs, interests, wants, and the sense of pleasure that comes from achieving certain goals. It is well known that human actions are driven by instinct (Dewey, 1922). This implies that the individuals' behaviors are consistent with their perceived interests and needs. To put it in another way, the existence of a need explains the source of energy for human activity. Rather than that, let us situate these concepts within the context of the language learning process, where learners' motives/reasons play a critical role. Having a clear goal in mind when learning a new language is critical for students because it provides a sense of direction and purpose (Oxford & Shearin, 1994). When it comes to motivation for foreign language learning, Gardner's perspective is widely accepted in academic literature. Gardner (1985) suggests that motivation for language acquisition can be explored in both instrumental and integrative orientations. When it comes to a person's motivational factor, he views it as a personal property. Instrumental motivation is related with a person's desire to master a foreign language for any practical reason, most notably reading foreign texts or literature, obtaining an attractive job, or advancing in his or her career whereas integrative motivation is linked to an individual's desire to integrate into a foreign language culture, to acquire a foreign language in order to communicate freely with native speakers (Gardner, 1985).

Learning the host country's language is crucial for international students' socioeconomic and cultural progress in both the host society and their home country (Marangell, Arkoudis, & Baik, 2018). Language learning is crucial for personality development and education enhancement, as it provides direct access to the host country's intellectual treasures and the opportunity to engage directly with the host country's population (Zhang, Harzing, & Fan, 2018). These researchers addressed how a certain field of employment and job opportunities might pique learners' enthusiasm in their language acquisition. Additionally, a person who is fluent in two or more languages is an unquestionable asset in today's globalized society, and the ability to communicate in the host country's language has become a requirement; without it, obtaining work or establishing a successful career is just as difficult (Zorlu & Hartog, 2018); this is also applicable for international students.

The preceding research reveal that motivation is a complex phenomenon. In other words, it cannot be viewed in isolation; after all, it is only one type of drive among many. Rather than that, motivation relates to a given perception toward their urge to learn a foreign language (Crookes & Schmidt, 1991). Thus, a person's motivation for language acquisition can be deduced from the reasons behind their language learning actions (Kissau, 2006). This study assessed the motivation for international students to acquire Estonian as a foreign language in a similar way. Additionally, this study sees perceptions of the importance of learning Estonian as a subjective process that is inextricably linked to each student's unique cognitive ability, nationalistic goal, and attitude toward the host nation and co-national community residing in the host country. Indeed, this study tries to comprehend international students' instrumental and integrative motives for learning Estonian as a foreign language.

3. INSTRUMENTAL AND INTEGRATIVE MOTIVATION IN LEARNING FOREIGN LANGUAGE

As previously stated, instrumental motivation and integrative motivation are two separate types of motivation for learning a foreign language. Gardner (1985) developed a more detailed questionnaire of motivation that included several instrumental and integrative components such as the intensity of the desire to learn a foreign language, the student's attitude toward the institution, the teacher, integrative components such as interest in foreign languages in general, attitude toward the target language's culture, and the student's primary orientation.

Gardner's (1985) approach has been widely used in research on second language learning. Researcher (Vaezi, 2008) found that the students' integrative motivation was approximately average using a similar technique to Gardner's (1985). Vaezi (2008) indicates that learners were motivated by the prospect of communicating with non-native English speakers and gaining insight into their cultures. Based on a sample size of 81 students, researchers (Al-Tamimi & Shuib, 2009) included and compared three categories of motivation: instrumental, integrative, and personal, and discovered that the majority of students were motivated instrumentally.

Rahman (2005) argued that Gardner's (1985) approach is problematic in a monolingual setting. He did a study on Bangladeshi English language learners and concluded that instrumental motivation is the primary motivator for undergraduate students in Bangladesh who wish to acquire English as a foreign language. Along with the fact that Gardner's model is not applicable to all learning situations, another shortcoming is that it does not reflect the dynamic nature of motivation, that is, the changes that occur over time and in response to environmental factors.

Dörnyei (1990) developed a new model of motivation that takes such shifts into account. His model is inspired by the theory of future self-images and does include several phases, together with initial motivation, which refers to goals established prior to the start of learning, supporting motivation, which refers to actions taken to maintain motivation throughout the learning process, and retrospective analysis, which refers to students' assessment of their own success. This assessment influences the decision to continue learning, which results in the formulation of particular goals, completing the cycle once more.

Unlike the aforementioned research, this study uses Estonian as the target language. The questionnaire items in this study also take into account the Estonian language-learning context, and most importantly, this study's sample is completely different from that of other studies cited in this article. Indeed, the sample for this study is comprised of international students studying the Estonian language in Estonia using English as the medium of instruction

4. METHOD

4.1 Fieldwork and data collection

A fieldwork with sequential inquiry (Toyon, 2021) was designed with the goal of collecting data through face-to-face interactions and communication via various digital platforms such as Facebook, Whatsapp, and Skype. International students from several countries studying in Estonia were personally contacted. In addition, international students were approached at a number of events held by various organizations that dealt with language cafes and the integration of foreigners in Estonia. In total, 92 students from various regions of Estonia, most notably Tartu, Tallinn, and the Ida-Virumaa region, participated between 2019 and 2021 and this paper focuses exclusively on the data obtained from those students.

Due to the nature of the research and the difficulties in gathering individual instances, the snowball sampling technique was utilized. The total sample size is 92 students, 32 of whom are female and 60 of whom are male; 32 of the students are from European Union (EU) member nations, while the remaining 60 are from non-EU member countries; 21 of the 32 female students are from countries outside the European Union, while 11 are from the EU.

4.2 Operationalization and questionnaire

Table 1 comprises descriptive data, notably the frequency of responses, as well as the independent or explanatory variables and their associated indicators. Additionally, it includes the category of dependent variable, which is divided into five subcategories.

While Gardner's (1985) model served as a guide, other pertinent literatures (Dörnyei, 1994; Hernandez, 2006) were also considered for developing the questionnaire. Questionnaire items were compiled from two perspectives, for example, instrumental motivation and integrative motivation. The questionnaire contains a total of 17 items. Following a review of the relatable literature, six items were incorporated in the

instrumental motivating section, while eight items were included in the integrative motivating part. Because the questionnaire was created with Estonian language learning as a foreign language in mind, all of these items were carefully phrased and adapted for Estonian language learning in this study. The questionnaire's fourteen items were categorical and were retrofitted to a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Cronbach's alpha value for the items was 0.76, which is considered reliable.

4.3 Analytical strategy

For analytical purposes, IBM SPSS statistics software version 26 was used. CHAID technique (Kass, 1980) was undertaken to ascertain which instrumental and integrative motivating items are most important for international students who value Estonian language acquisition. This method's purpose is to classify items in order to identify those that are more likely to belong to the target group. In fact, the CHAID method's central notion is to forecast an object's membership in a given class of dependent variables using the values of multiple independent variables. As a result, the studied independent variables are classified into groups based on their degree of variation in the dependent variable's values.

Inherently, this decision tree method is comparable to regression analysis in that both methods evaluate the statistical relationship between a dependent variable and a set of independent variables; however, in regression analysis, the relationship is presented as a general predictive equation, whereas in CHAID, the relationship is presented as a tree structure obtained through hierarchical data segmentation. This method was chosen for this study to take advantage of these benefits; additionally, it enables visual presentation of the results and fits the research objective of establishing a portrait of respondents expressing agreement or disagreement with their perceptions of the importance of learning Estonian.

5. FINDINGS AND DISCUSSIONS

5.1 Importance of learning Estonian language

According to the descriptive data in Table 1, 40.2 percent of respondents agreed that learning Estonian is important, while 57.6 percent strongly agreed. Respondents provided a variety of justifications. For example, 56.5 percent of respondents strongly agreed that learning Estonian language is important in order to advance their career/find job; 63 percent of respondents strongly agreed that learning Estonian language would be useful in obtaining a good salary. This perception of agreement corroborates the findings of researchers (Zorlu & Hartog, 2018) who contended that competence in a foreign language provides access to employment opportunities in a range of areas.

However, international students who participated in this study perceived that learning Estonian language is important not only to obtain a job and a good salary, but also to make friends in Estonia. For example, 60.9 percent of respondents strongly agreed that learning Estonian language is important to make friends in Estonia; 55.4 percent of respondents strongly agreed that learning the Estonian language is critical for feeling more at ease while interacting with Estonian speakers. Likewise, 41.3 percent of respondents strongly agreed that learning Estonian language is vital for meeting and conversing with more and varied people living in Estonia.

Indeed, the ability to communicate in host country's language enables migrants to make a favorable impression and win respect in host society (Zhang, Harzing, & Fan, 2018). In line with this, this study also found that 55.4 percent of international students surveyed stated are learning Estonian language because it will win them more respect from others. Additionally, 57.6 percent of international students surveyed strongly agreed that they are learning the Estonian language in order to gain an understanding of the culture and social life of Estonian-speaking people.

Foreign language study strengthens intellectual capacities and increases one's education and knowledge (Marangell, Arkoudis, & Baik, 2018). Through the study of another language, one develops an awareness of his or her mother language; after all, until one comes into contact with another, one may have little reason to study one's own culture. 28.3 percent of respondents strongly agreed that they are learning Estonian in order to increase their knowledge and education.

Correspondingly, this study found that 30.4 percent of international students who participated strongly agreed that they would need it for academic life because it would enable them to access additional Estonian literature resources; similarly, 43.55 percent of respondents strongly agreed that they were learning Estonian language to better understand and appreciate Estonian art and literature.

Table 1: International student's perceptions of learning Estonian language (in percentage form)

Items	Independent variables (X)	Dependent variable (Y)	Neither agree nor disagree			Strongly agree	
			Strongly disagree	Disagree	Agree		
X1	Need it for future career/getting job		-		12	31.5	56.5
X2	For making myself knowledgeable and educated		-	13	40.2	18.5	28.3
X3	It will be useful in getting good salary		-	-	4.3	32.6	63
X4	Need it to use because of strong desire to know all aspects of Estonia		-	43.5	39.1	5.4	12
X5	Need it for academic life since it will enable to access more Estonian literature resources		-	6.5	39.1	23.9	30.4
X6	Other people will respect more for learning Estonian Language		-	6.5	38	55.4	-
X7	It will allow to be more at ease with people who speak Estonian		-	-	12	32.6	55.4
X8	To meet and converse with more and varied people living in Estonia		-	-	37	21.7	41.3
X9	To better understand and appreciate the Estonian art and literature		-	-	5.4	51.1	43.5
X10	To make Friends in Estonia		-	-	8.7	30.4	60.9
X11	To make friendship with native Estonian-speakers		-	26.1	32.6	22.8	18.5
X12	To learn about the culture and social life of Estonian-speaking people		-	-	9.8	32.6	57.6
X13	I learn because Estonian language teacher makes lesson enjoyable		-	23.9	45.7	19.6	10.9
X14	If I plan to stay in another country, I would prefer to learn the language of that country		-	28.3	38	22.8	10.9
Y	Learning Estonian language is important ('not important at all' to 'very important')		-	-	2.2	40.2	57.6

Source: author's calculation based on primary data

5.2 Motivational variables interacting with the importance of learning Estonian language

To understand how motivating variables affect the importance of learning Estonian, three models were created using the CHAID technique. Cross validation was utilized to evaluate CHAID analysis, and the growth limit for minimum cases in parent node was determined to be 20 and for child node to be 10 for all models. The first model depicts the significant instrumental motivational variables that influence the perception of the importance of learning Estonian language, the second model depicts the significant integrative motivational variables that influence the perception of the importance of learning Estonian language; and model three incorporates the results of combining instrumental and integrative motivational

variables and identifies the most important variables that affect the perception of the importance of learning Estonian language.

5.2.1 Instrumental motivational variables

Table 2 offers pertinent information about the Model specifications and results. As independent variables, instrumental motivational variables (X1-X6) have been included in the model 1. There were a total of five nodes created, three of which were terminal nodes. Model 1 demonstrates that when it comes to perceiving the importance of learning Estonian, the most relevant instrumental variables are the motive of increasing one's knowledge and education (X2), and future career/getting a job (X1). Variable X2 is strongly associated with the dependent variable (Y) and has the greatest power for grouping observations. In other words, the primary instrumental motivating variable used to categorize respondents' perceptions of the importance of learning Estonian language is the motive that learning Estonian will help international students become more knowledgeable and educated.

Figure 1 (see Appendix) depicts a visual representation of the tree's nodes and their associations. According to the data presented in Figure 1 (see Node 4), if X1 is '>Disagree' AND X2 is '>Agree', the probability of Y (Very important) is 68.9 percent. Likewise, in word, if international students 'agree' (or 'strongly agree' or 'neither agree nor disagree') that learning Estonian language will increase their knowledge and education AND 'agree' (or 'strongly agree') that learning Estonian language is necessary for future career/employment, the probability of perceiving learning Estonian language as 'very important' is 68.9 percent. However, such prediction carries a risk; more precisely, if the perception of instrumental motivation in terms of six independent variables is known, the probability of mistakenly classifying the importance of learning Estonian language as 'not important at all' to 'very important' is 28.3 percent. It is also worth noting (as illustrated in Table 3) that the first model's overall accuracy is 71.7 percent. In other words, the model correctly categorized 66 of the 92 international students in the observed sample.

5.2.2 Integrative motivational variables

Model 2 (see Table 2) provides insights on the interaction between integrative motivational variables and the perceived importance of Estonian language acquisition. The model was developed to include a total of eight independent variables while maintaining the same dependent variable as in Model 1. Ten nodes were created in all, with six of them being terminal nodes. Model 2 reveals that when it comes to perceiving the importance of learning the Estonian language, the most significant integrative variable is the desire to make friends in Estonia (X10); the next most significant variables are the desire to make friends with native Estonian speakers (X9) and to gain a better understanding and appreciation of Estonian art and literature (X11); and finally, the desire to meet and converse with a more variety of people living in Estonia (X8).

For international students who strongly agree that learning Estonian is crucial for making friends in Estonia, the primary motive is not just to make friends with native Estonian speakers, but also to meet and communicate with a wider range of people living in Estonia. As Figure 2 (see Appendix) shows, if X10 is '>Agree' AND X11 is '<Neither agree nor disagree', AND X8 is '>Agree' the probability of Y (Very important) is 94.1 percent. In words, if international students 'agree' (or 'strongly agree') that learning Estonian language is important for making friends in Estonia AND 'disagree' (or 'neither agree nor disagree') that learning Estonian language is important for making friends with native Estonian speakers AND 'strongly agree' that learning Estonian language is important for meeting and conversing with a diverse range of people living in Estonia, the probability of perceiving learning Estonian language as 'very important' is 94.1 percent. This prognosis, however, is also not risk-free. When the perception of integrative motivation is understood in terms of eight independent variables, the probability of incorrectly rating the importance of learning Estonian as 'not important at all' to 'very important' is 27.2 percent. However, Table 4 indicates that the total accuracy of the second model is 72.8 percent.

5.2.3 Combining the importance of instrumental and integrative motivational variables

Model 3 (see Table 2) incorporates all 14 items in order to ascertain which instrumental and integrative motivational variables are most influential in perceiving the importance of learning Estonian. Among these fourteen motivational variables, the most relevant one for categorizing the perceived importance of learning Estonian is the opinion that learning Estonian is important for expanding one's knowledge and education (X2). Other relevant variables include future career/employment (X1), the importance of learning Estonian language for making friends with native Estonian speakers (X11), and the importance of learning Estonian language depending on the plan of stay in Estonia or elsewhere (X14).

As illustrated in Figure 3 (see Appendix), if X2 is '>disagree' AND X1 is '>agree', AND X11 is '>agree', the probability of Y (Very important) is 81.2 percent (see Node 9, Figure 3). Similarly, if X2 is '>disagree' AND X1 is '<= agree', AND X14 is '> neither agree nor disagree', the probability of Y (Very important) is 61.5 percent (see Node 6, Figure 3). In words, if international students 'agree' (or 'strongly agree') that learning Estonian is important for knowledge and education, the probability of Y (Very important) is 51.2 percent (see Node 2, Figure 3). Among this group (51.5 percent) of students, the most significant motivational variable for learning Estonian: it is important for future career and employment. Among these students who 'agree' that it is important for future career and employment, they also learn Estonian language in order to make friends with native Estonian speakers, and they have an 81.2 percent probability of considering learning Estonian language as 'very important' (see Node 9, Figure 3).

This appears to be quite practical: among those international students (51.5 percent) who 'disagree' (or 'neither agree nor disagree' or '=<disagree') that they need Estonian language for future career/getting job, the significant criteria is whether they intend to stay in Estonia or another country (see Node 6, Figure 3). Although the total accuracy of this third model is 81.5 percent (as shown in Table 5), this forecast is also subject to risk. The risk of incorrectly rating the importance of learning Estonian as 'not important at all' to 'very important' is 18.5 percent when the perception of instrumental and integrative motivation is interpreted in terms of fourteen independent variables.

Table 2: Importance of learning Estonian language and instrumental motivational variables

Model	Model 1	Model 2	Model 3
Specifications	Learning Estonian language is important (Y)		
Dependent Variable	Learning Estonian language is important (Y)		
Independent Variables	X1, X2, X3, X4, X5, X6	X7, X8, X9, X10, X11, X12, X13, X14	X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, X12, X13, X14
Validation	Cross Validation		
Maximum Tree Depth	3	3	3
Minimum Cases in Parent Node	20	20	20
Minimum Cases in Child Node	10	10	10
Results	Independent Variables Included		
Number of Nodes	5	10	10
Number of Terminal Nodes	3	6	6
Depth	2	3	3
Risk	Re-substitution: Estimate .283, Std. Error .047	Re-substitution: Estimate .272, Std. Error .046	Re-substitution: Estimate .185, Std. Error .040
	Cross-Validation: Estimate .359, Std. Error .050	Cross-Validation: Estimate .489, Std. Error .052	Cross-Validation: Estimate .326, Std. Error .049

Source: author's calculation based on primary data

Table 3: Classification matrix of Model 1

Learning Estonian Language is important				
Observed	Predicted			Percent Correct
	Neither important nor unimportant	Important	Very important	
Neither important nor unimportant	0	2	0	0.0%
Important	0	23	14	62.2%
Very important	0	10	43	81.1%
Overall Percentage	0.0%	38.0%	62.0%	71.7%

Source: author's calculation based on primary data

Table 4: Classification matrix of Model 2

Learning Estonian Language is important				
Observed	Predicted			Percent Correct
	Neither important nor unimportant	Important	Very important	
Neither important nor unimportant	0	2	0	0.0%
Important	0	26	11	70.3%
Very important	0	12	41	77.4%
Overall Percentage	0.0%	43.5%	56.5%	72.8%

Source: author's calculation based on primary data

Table 5: Classification matrix of Model 3

Learning Estonian Language is important				
Observed	Predicted			Percent Correct
	Neither important nor unimportant	Important	Very important	
Neither important nor unimportant	0	2	0	0.0%
Important	0	27	10	73.0%
Very important	0	5	48	90.6%
Overall Percentage	0.0%	37.0%	63.0%	81.5%

Source: author's calculation based on primary data

6. CONCLUSION

The purpose of this work was to explore international students' perceptions of the importance of Estonian language acquisition and to determine which motivational variables influence that opinion. In fact, at the beginning this study imposed two main questions: Is it important for international students to learn Estonian language? If so, why? In addition, which motivational variables have the strongest interaction with the perceived importance of learning Estonian? The findings of the descriptive analysis indicate that the majority

of respondent strongly agreed that learning Estonian language is important for them. The majority of respondents perceived that learning Estonian language is important in order to make friends in Estonia, to learn about the culture and social life of Estonian-speaking people, and to further their career/find work. Additionally, this study employed the CHAID technique to develop three models to better understand the association of these motivational variables. The study subsequently found that, among the motivational variables, the most significant variable in comprehending the category of the perception of importance is the idea that learning Estonian would boost students' knowledge and education. Additionally, the study revealed that, aside from knowledge and education, another significant motivation for learning Estonian is that it is necessary for future career and employment. The category of students who agreed that, in addition to knowledge and education, Estonian language proficiency is necessary for finding employment, perceive it as important whether they intend to stay in Estonia or another country. Additionally, the most significant integrative variable is the motivation to make friends in Estonia. Within this category of students, learning Estonian is important not just for making friends with native Estonian speakers, but also for meeting and conversing with a diverse range of people living in Estonia and for appreciating Estonian art and literature.

By revealing these results, this work underlines its scientific singularity. The theoretical significance of this work is demonstrated by the possibility of applying these findings to the literature on international students' motivation to learn the host country's language. By identifying the significant variables that have the strongest interaction with the perceived importance of learning Estonian, this study has enriched academic discourse not only in the language discipline, but also in other domains. The research's practical significance is that knowing why studying the Estonian language is important for international students would aid academics and policymakers in implementing associated measures to assure international students' motivation to learn Estonian.

This study contains some limitations that it aims to retain for future research. The sample size is certainly something that future studies might consider. Conservative quantitative researchers may wonder why this study lacks a hypothesis; let the aims of this study to provide an answer to this question. However, it is likely that, in the future, by using a larger sample size, additional quantitative techniques such as principal component analysis, confirmatory factor analysis, and even structured equation modeling can be constructed to better understand the relationship between instrumental and integrative motivation.

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Notes

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Appendix

Decision tree (importance of learning Estonian language & instrumental motivational variables)

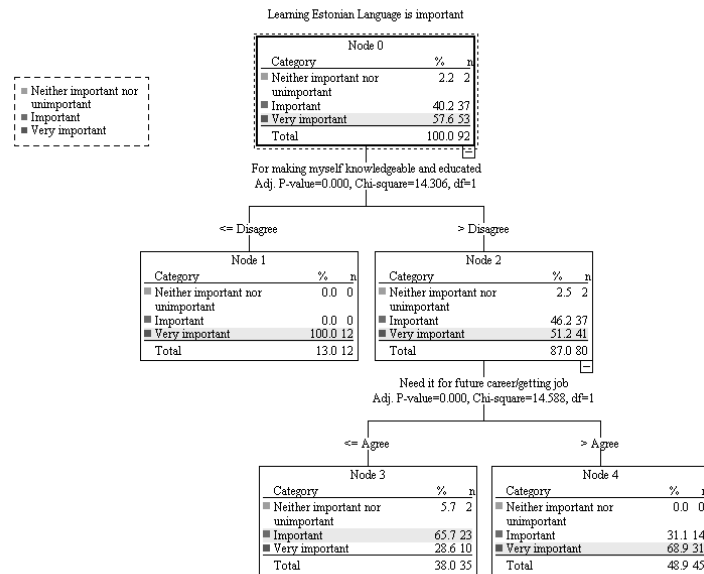


Figure 1: Decision tree (importance of learning Estonian language & instrumental motivational variables)

Decision tree (importance of learning Estonian language & integrative motivational variables)

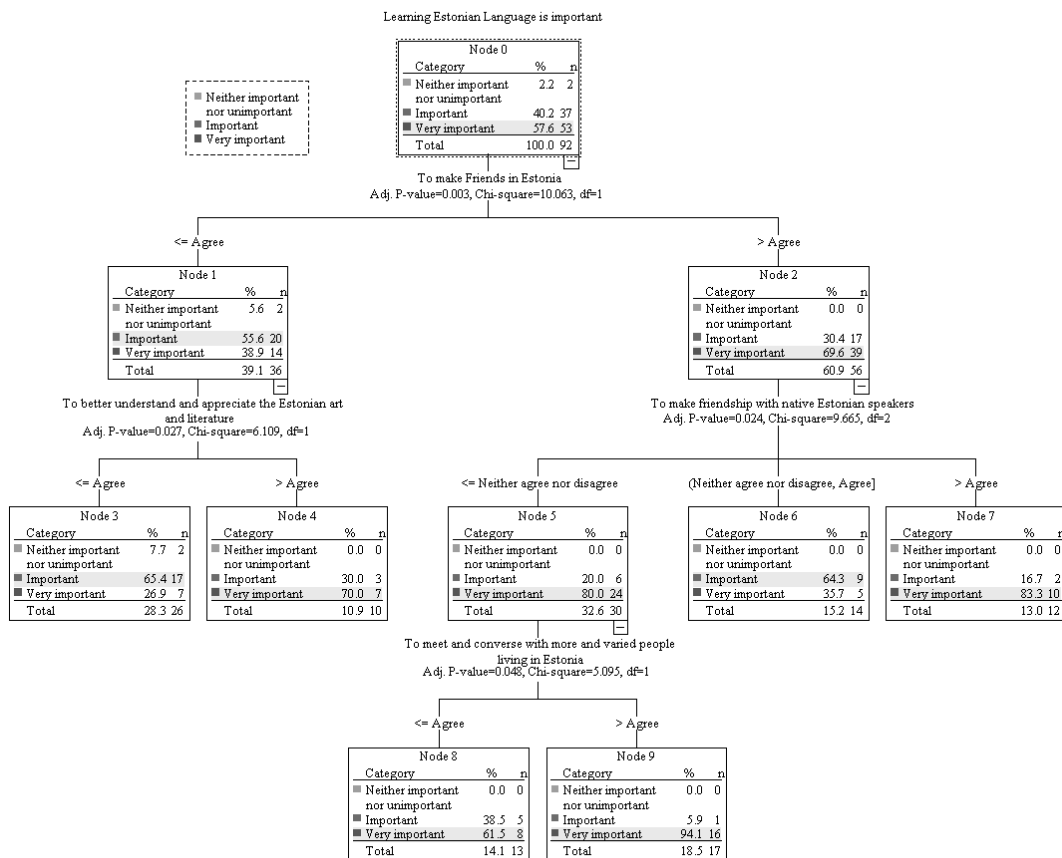


Figure 2: Decision tree (importance of learning Estonian language & integrative motivational variables)

Decision tree (importance of learning Estonian language, instrumental & integrative motivational variables)

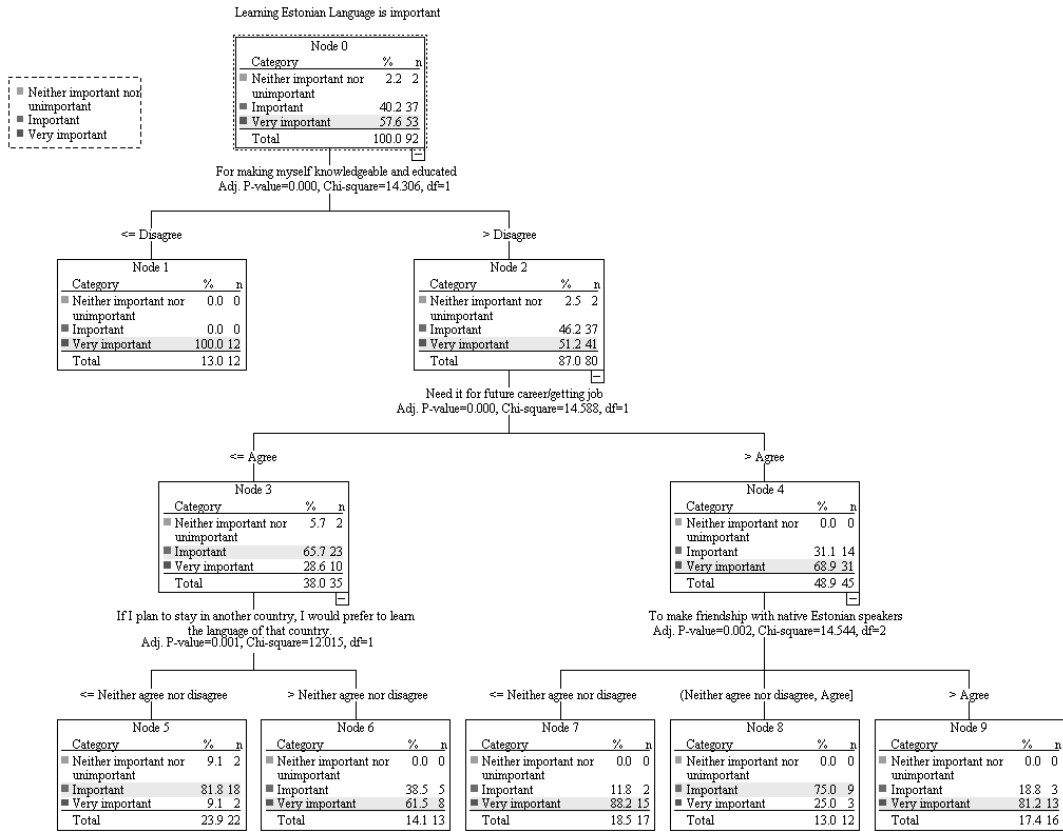


Figure 3: Decision tree (importance of learning Estonian language, instrumental & integrative motivational variables)