Beliefs About People Involved in FL Learning: Investigating Differences Based on FL Proficiency Level †

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Article

Beliefs About People Involved in FL Learning: Investigating Differences Based on FL Proficiency Level †

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Abstract

Purpose: The present study investigated the differences in beliefs about people involved in foreign language (FL) learning depending on the participants' FL proficiency level. Method: The study used the semantic differential to explore beliefs about people involved in FL learning. The sample for the study consisted of 90 low-proficiency and 90 high-proficiency volunteer participants. Using principal component analysis, two-factor and four-factor solutions were obtained for participants with high and low FL proficiency levels, respectively: the factors *Diligence* and *Remoteness* were extracted for both subsamples, and the factors *Mediocrity* and *Eccentricity and openness to experience* were obtained additionally for the subsample of low-proficiency participants. Significant shifts in the beliefs about people involved in FL learning between two subsamples were in the factors *Unsociability* and, to a much lesser extent, *Vitality*. Participants with high FL proficiency perceived both bilingual and monolingual "roles" as more friendly, mobile, sociable, and active than participants with low FL proficiency did. The findings indicated generally negative attitudes displayed by participants in both subsamples toward "Migrant worker with poor Russian skills". The scatter plot showed that participants with high FL proficiency tended to display in-group favouritism towards bilingual "roles" and out-group bias towards monolingual ones, especially the "role" "Convinced monolingual".

Keywords: bilingualism; foreign language learning; beliefs about foreign language learning; mindsets; semantic differential; psychosemantics

Introduction

In current approaches to studying FL learning, it is widely accepted that research in this field should examine both the behaviour of FL learners (what they do) and the reasons behind their engagement in language learning (why they do what they do) (Manchón, 2009). Different outcomes and rates of FL learning are caused by external and internal factors, such as motivation, anxiety, strategy use, aptitude, personality, and beliefs (Dörnyei, 2005; Ellis, 2008). The study of learner beliefs is highly important as an area of investigation because beliefs can have an impact on learners and their language learning experience, either positively or negatively (Alanen, 2003). Understanding these beliefs can contribute to explaining the behaviour of learners' learning motivation (Alhamami, 2018). Beliefs are dynamic constructs that may change and adapt over time, influenced by various contextual factors, including FL proficiency level (Dubravac & Latić, 2019; Mercer, 2011; Zhong, 2015). Beliefs about language learning can be complex and varied, with some evolving and changing over time, while others remain consistent (Fujiwara, 2015; Liu, 2018; Mercer, 2011; Zhong, 2015).

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Language competence involves multiple skills and abilities, which makes the language learning mindset structure more complex (Lou & Noels, 2019). Many multilinguals often feel different when speaking different languages, like they change their personalities when switching from one language to another (Dewaele & Nakano, 2013; Ożańska-Ponikwia, 2012; Pavlenko, 2006). Previous studies have found that the responses of bilingual individuals on personality tests can vary based on the language in which they complete the tests (Chen et al., 2014; Dylman & Zakrisson, 2023; Ramírez-Ezparza et al., 2006). According to some researchers, foreign language learning is associated with the development of secondary language personality (Khaleeva, 1989; Tarnopolsky et al., 2021). Secondary language personality is a monitor that prevents a speaker from breaking linguistic, social, and cultural norms and conventions in the target language speech community, allowing them to communicate in the same way as the native speaker (Tarnopolsky et al., 2021). Based on these findings, it could be concluded that high FL proficiency changes personality to some extent and could change the way high FL proficiency speakers perceive themselves and others.

Changes in beliefs are studied using BALLI (Fujiwara, 2014) and another Likert scale instruments (Tanaka & Ellis, 2003), by examining the metaphors that learners use when talking about their learning experiences (Ellis, 2008), qualitative content analysis of semi-structured interviews, classroom observations, and learning journals (Peng, 2011). Gardiner et al. (2021) have used the repertory grid technique as a method to investigate perceptions about language learning contexts. In this study, the semantic differential (SD) for studying beliefs about people involved in FL learning was used. The research on beliefs about FL learning and bilingualism/multilingualism was conducted in different countries and language contexts: Afghanistan (Orfan & Seraj, 2022), Japan (Tsunemoto et al. 2023), Saudi Arabia (Abdelhalim, 2023), Finland (Pirhonen, 2022), Poland and Spain (Wach & Monroy, 2020), Norway (Haukås et al., 2022), etc. There are studies examining the beliefs and attitudes about language learning and multilingualism conducted among participants from Russia (Calafato, 2020; Author, 2018; Author, in press), but without analysing differences in these beliefs depending on the language proficiency of participants.

The main purpose of the study is to identify the differences in FL learning beliefs depending on the FL proficiency level using semantic differential for studying beliefs about people involved in FL learning.

The study addresses the following research questions:

RQ1: What is the difference in factor solutions underlying semantic spaces got for low- and high-proficiency participants?

RQ2: Do low- and high-proficiency participants perceive people ("roles") involved in FL learning differently?

RQ3: Do high-proficiency participants display in-group favouritism and out-group bias towards bilinguals and monolinguals, respectively?

Literature Review

Individual Differences in FL Learning (Second Language Acquisition)

A myriad of studies about the role of individual variation in FL learning have been conducted over the last several decades (Dewaele, 2009; Dörnyei & Ryan, 2015; Ellis, 2004; Griffiths & Soruç, 2020, 2021; Jung et al., 2020; Li et al., 2022; Pawlak, 2022; Pawlak & Kruk, 2022; Skehan, 1989). IDs are defined as "characteristics or traits in respect of which individuals may be shown to differ from each other" (Dörnyei, 2009) and that may influence learning processes, behaviours, and outcomes (Benson, 2005; Cohen & Henry, 2020; Li et al., 2022; Pawlak, 2020). According to Pawlak (2022), most of the individual differences are "the result of an intricate interplay of cognition, affect, and social influence". Horwitz (1999) stated that "language learners are individuals approaching language learning in their own unique way" (p. 558).

Different second language acquisition (SLA) theories interpret the role of IDs in language learning in different ways (Li et al., 2022). Skill Acquisition Theory assumes that different stages of

 doi:10.20944/preprints202511.0995.v1

SLA are characterised by various forms of mental processes and knowledge, including IDs (DeKeyser, 2022). Complex Dynamic Systems Theory views the learner as a complex system and highlights the role of IDs in SLA (Larsen-Freeman, 2022). According to the Interaction Approach to SLA, various IDs such as motivation, proficiency, age, etc. are seen as important variables in the relationship between interaction and second language development (Mackey et al., 2022). Usage-based approaches assume that linguistic, cognitive, and environmental factors shape the language learning process jointly and thus result in considerable individual variations in learning (Wulff, 2022). On the other hand, Input Processing focuses on the SLA as an unconscious process, and, according to this approach, IDs don't significantly influence the SLA (Van Patten, 2022).

A review of the literature showed that there is not a clear consensus regarding what could be labelled as an individual difference in FL learning. Skehan (1989) was one of the first to emphasise the importance of IDs in FL learning and mentioned numerous characteristics like aptitude, motivation, language learning strategies, extroversion/introversion, risk-taking, intelligence, field in/dependence, and anxiety. Ellis (2004) proposed a taxonomy according to which IDs are grouped into four categories: "abilities" (i.e., cognitive capabilities for language learning), "propensities" (i.e., cognitive and affective qualities involving preparedness or orientation to language learning), "learner cognitions about L2 learning" (i.e., conceptions and beliefs about L2 learning), or "learner actions" (i.e., learning strategies). Dörnyei (2005) listed personality, language aptitude, motivation, learning/cognitive styles, and learning strategies as core variables but also regarded anxiety, self-esteem, creativity, willingness to communicate, and learner beliefs as important characteristics in the ID research. Arabski and Wojtaszek (2011) identified IDs such as personality, strategies, self-efficacy, autonomy, and gender. Griffiths and Soruç (2021) included 11 key IDs that were found to be significant in language learning: motivation, aptitude, strategies, gender, culture/nationality/ethnicity/race, beliefs, autonomy, personality, learning style, age, and affect. According to Li et al. (2022), ID factors can be classified into four categories: cognitive, conative, affective, and sociocultural/demographic variables. Cognitive characteristics incorporate working memory, declarative/procedural memory, language aptitude, cognitive styles, learning strategies, and metacognition; conative characteristics include mindsets, motivation, willingness to communicate, and goal complexes; affective characteristics comprise enjoyment, anxiety, self-efficacy, and learner beliefs; and sociodemographic characteristics subsume identity and age. Pawlak and Kruk (2022) considered age, gender, aptitude and working memory, personality, grit, learning styles, learning strategies and self-regulation, beliefs, motivation, willingness to communicate, engagement, and emotions as salient individual factors in language learning.

As we can see, most researchers defined beliefs as one of the IDs that influenced the process of language learning. The fact that beliefs were not included in some ID taxonomies could be explained by the fact that beliefs could be viewed as insufficiently stable and "proper" (Dörnyei, 2005). The traditional approach, explicitly or implicitly, assumed that IDs were concrete, stable through time, and context-independent (Jung et al., 2020). But recent conceptualisation of IDs is consistent with the "dynamic turn" in research on L2 development, which stresses the dynamicity of the L2 system (Jung et al., 2020; Larsen-Freeman, 2020; Larsen-Freeman & Cameron, 2008). In terms of the theory of complex dynamic systems, IDs can be considered complex systems that are characterised as open, adaptive, and nonlinear (Jung et al., 2020). Being socially constructed, experience-based, and interacting with contextual constraints and affordances (Kalaja et al., 2015; Kalaja & Barcelos, 2003; Mystkowska, 2014), beliefs can be identified as IDs within a dynamic approach to SLA learning.

The Relationship Between Language Learning Beliefs and Language Proficiency

Beliefs about FL learning can be broadly defined as "opinions and ideas that learners (and teachers) have about the task of learning a second/foreign language" (Kalaja & Barcelos, 2003). According to Kalaja et al. (2015, p. 10), "holding a belief (or believing) is an occasion when a learner…reflects on aspects of language learning or teaching, relates these to experiences of his or her own or those of others, and assigns these aspects his or her own personal meanings".

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One of the key issues in the study of language learner beliefs is to what extent learners' beliefs change over time (Ellis, 2004). Traditionally, learner beliefs have been considered stable and static. But the parameters of a social situation can evolve over time. This change has an impact on the characteristics of the learners in that particular context. Learners' beliefs about language learning are dynamic, able to adapt to changes in environment, goal-orientation, and interpersonal relations (Li & Ruan, 2015; Zhong, 2015). They are subject to contextual mediation and are constantly evolving (Peng, 2011; Yang & Kim, 2011). Effective language learners are those who possess the ability to adapt to the various constraints and opportunities presented by different contexts rather than being restricted by fixed beliefs (White, 2008). Language learning beliefs are complex and dual, with some evolving and changing over time, while others remain stable (Fujiwara, 2015; Liu, 2018; Mercer, 2011; Zhong, 2015).

Studies about changes in beliefs were conducted both on one sample at different stages of FL learning (Liu, 2018; Pirhonen, 2022; Ritzau, 2018) and on different groups with different proficiency levels at one specific point in time (Adithepsathit & Wudthayagorn, 2018; Dubravac & Latić, 2019; Gómez, 2019; Gómez & Díaz Larenas, 2020). Some beliefs can be modified through language learning experiences, while others remain unchanged even after learning a new language for the first time (Fujiwara, 2015). Beliefs may vary in different years of the study. The findings by Adithepsathit and Wudthayagorn (2018) showed that the level of beliefs about foreign language aptitude, the difficulty of language learning, and the nature of language learning gradually rose from the first year to the third year. However, in the fourth year, it dropped to a level similar to or slightly below that of the first year.

The level of proficiency in EFL may impact learners' beliefs, particularly their self-efficacy beliefs. Enhancing language proficiency can reinforce self-efficacy beliefs, resulting in considerable modifications in self-efficacy and confidence beliefs (Liu, 2018; Tanaka & Ellis, 2003; Zhong, 2015). Pirhonen (2022) and Ritzau (2018) have demonstrated a shift towards more communicatively oriented beliefs. According to Dubravac & Latić (2019), effective communication is more important for high achievers in FL learning than perfect grammar or pronunciation. Participants with high language proficiency believed they had a special ability for learning foreign languages (Fujiwara, 2014; Gómez & Daz Larenas, 2020) and were more likely to believe that English was an easy language (Fujiwara, 2014; Gómez, 2019; Gómez & Díaz Larenas, 2020; Liu, 2018).

Language and Intergroup Bias

As stated by Christakis (2019), "the preference for one's own in-group is a cultural universal" (p. 266). This preference, also known as in-group favouritism, can be explained by social identity theory (Tajfel, 1974). According to this theory, individuals often develop a sense of belonging to specific groups and may subsequently show preference towards their own group or display discrimination towards other groups they do not belong to but compare themselves to (Tajfel, 1974). Language is often conceptually associated with other group memberships, such as racial or ethnic groups, and is an important factor in the formation of group membership (Montaruli et al., 2011). Liebkind et al. (2006) found that Swedish-speaking Finns showed in-group favouritism as well as out-group derogation. A study by Byers-Heinlein et al. (2017) showed that monolingual children in Canada preferred monolingual speakers of their own language; on the other hand, bilingual children's preferences tended to be less straightforward and were greatly influenced by individual factors. Bilingual students in Vietnam displayed more discriminatory behaviour towards non-bilingual students within their own school as opposed to other bilingual students from different schools (Vuong et al., 2021). A study conducted in South Tyrol, Italy, presented the development of in-group favouritism by Italian- and German-speaking primary school children (Angerer et al., 2016).

Learning the language of members of the minority group benefits learners' perceptions of that language, its culture, and its speakers (Dubiner, 2018). According to studies (Bekerman, 2005; Dubiner, 2018; Guimond & Palmer, 1993), taking language courses can positively influence learners' attitudes towards the community that speaks that particular language. Empirical studies have shown

 doi:10.20944/preprints202511.0995.v1

a correlation between learning a foreign language and a decrease in prejudice towards native speakers of that language (Rubenfeld et al., 2007; Wright & Bougie, 2007).

Language and prejudice are closely related (Collins & Clément, 2012). Mepham and Martinovic (2018) concluded that people speaking multiple languages are more tolerant of out-groups because they have an enhanced cognitive flexibility that is related to higher deprovincialisation, etc., a "less in-group-centric worldview fostering openness to other cultures and out-groups" (Boin et al., 2020). The study by Calafato (2021) found that participants who spoke two languages as their first language were statistically more likely to have less prejudice towards out-groups and hold more positive multicultural attitudes compared to monolinguals.

Both studies on implicit (König et al., 2022; Stang et al., 2021) and explicit (Asbrock, 2010) attitudes showed negative attitudes towards people with immigrant backgrounds. But multilingual individuals have higher cross-cultural empathy (Dewaele & Stavans, 2014) and better acceptance of ethnic outgroups (Mepham & Martinovic, 2018). However, the study by Mepham & Martinovic (2018) showed that high-proficiency Dutch multilinguals tended to be more critical towards non-Western ethnic outgroups, probably due to their limited proficiency in Dutch.

Materials and Methods

Participants

The participants in this study were 180 students and graduates of FL education, humanities and social sciences, STEM, and medicine degrees at various universities in Russia. 90 participants with low (age range: 18 to 30; mean age: 20.9) and 90 participants with high self-reported FL proficiency level (age range: 18 to 30; mean age: 22.2) took part in the study on a volunteer basis.

Participants had language skills in English, German, French, Spanish, Italian, Swedish, Dutch, Japanese, and Chinese. 29 participants were proficient in 2 FLs, and 7 were proficient in 3 FLs. One group of participants—56 people—were tested using the paper version; the other—124—were tested online. Participants' characteristics are presented in Table 1.

Table 1. *Participants' Characteristics.*

	High FL proficiency (n= 90)	Low FL proficiency (n= 90)
Age range	18-30	18-30
Age, mean (SD)	22.2	20.9
Gender		
Males	28	37
Females	62	53
Academic specialisation		
FL education	81	0
Humanities (excluding FL education)	5	45
STEM	4	19
Medicine	0	2

 doi:10.20944/preprints202511.0995.v1

Without higher education	0	24
Mode of data collection		
	27	29
Paper		
	63	61
Online		
Language		
English	90	90
German	17	1
French	11	1
Spanish	5	0
Italian	3	0
Swedish	1	0
Dutch	1	0
Japanese	1	0
Chinese	1	0
Multilingual proficiency		
Proficiency in 2 FLs	27	2
Proficiency in 3 FLs	7	0

The study was conducted in Russian. All participants provided informed written consent prior to study enrollment.

Procedure

A combination of methods was used: semi-structured interviews and focus groups, the repertory grid technique, and SD. The advantage of this multi-level design is that the construct poles of the semantic differential are based on the respondent's own constructs from the repertory grid interview. This bottom-up approach allows for the creation of the poles instead of them being defined top-down (Osterberg-Kaufmann & Stadelmaier, 2020).

In a first step, using the methods of semi-structured interviews and focus groups, a Role Title List, or a set of elements, was compiled. The two main topics of the semi-structured interview and focus group questions were the reasons to learn a FL and the impact of being proficient in a FL on one's personal life and career and on the lives of other people (friends, relatives, acquaintances, or celebrities). As a result, a list of people creating a "FL environment" was obtained. The list of elements consisted of 15 "roles": 1) "Relative knowing a FL", 2) "Friend knowing a FL", 3) "FL teacher", 4) "A classmate (or colleague) knowing a FL better than you", 5) "Person convinced that one language is enough for a normal life", 6) "Person knowing a FL you would like to be like (a real person or a literary / movie hero)", 7) "Person whom knowledge of a FL helped to achieve career success", 8)

 doi:10.20944/preprints202511.0995.v1

"Person whom knowledge of FL helped to find close friends, a beloved one", 9) "Person for whom learning a FL is a hobby", 10) "Person who wanted to learn FL, but could not", 11) "Person knowing a rare FL", 12) "Migrant worker with poor Russian skills you often meet (janitor, salesman, etc.)", 13) "Specialist for whom Russian is a second language (doctor, teacher, engineer, etc.)", 14) "Myself now", 15) "Myself, if I could speak a FL as a native speaker". In the second stage, 29 participants were invited to participate in a triadic elicitation procedure to generate personal constructs concerning FL learning. The repertory grid sessions were done individually with each participant. The participant was asked to consider in what ways two elements are similar to each other yet different from the third member of the triad. An attribute used to represent this similarity formed one pole of the construct. A contrast pole was formed by an attribute representing in what way the third member of the triad is different. Then every participant was asked to rate the elements (people) on a 6-point scale (-3–3) on a set of bipolar constructs resulting from the elicitation procedure and fill out the grid row by row. The repertory grid interview procedure resulted in a data set, which was the starting point of quantitative analysis through the statistical procedure and qualitative thematic analysis. 148 bipolar constructs were elicited altogether.

The repertory grid data was analysed quantitatively and qualitatively. Each of the obtained repertory grids was subjected to principal component factor analysis (PCA) with varimax rotation using SPSS 23. Extracted components (n = 116) were labelled on the basis of the sets of bipolar constructs that the components include. Thematic analysis of the resulting components allowed for the identification of major themes common to all participants: *Vitality*, *Openness to communication*, *Diligence*, and *Sense of superiority*. The content analysis of the grid data was used to place construct labels into 4 semantic categories (thematic areas). The summary of categories and their corresponding frequencies for each construct is presented in Table 2.

Table 2. *Frequency of Construct Occurrence by Semantic Category.*

Semantic category	Number of constructs
Vitality	59 (40%)
Openness to communication	37 (25%)
Diligence	27 (18%)
Sense of superiority	25 (17%)
Total constructs elicited	148

SD for studying beliefs about people involved in FL learning included 12 bipolar scales: *selfish-selfless*, *friendly-distant*, *sociable-aloof* (Openness to communication), *arrogant-modest*, *caring-indifferent* (Sense of self-superiority), *mobile-slow*, *brave-cautious*, *spiritless – energetic*, *close-minded – curious*, *emotional-level-headed* (Vitality), *irresponsible-responsible*, *lazy-hardworking* (Diligence). SD for studying beliefs about people involved in FL learning also included universal scales from previous research, such as *active-passive*, *weak-strong*, *unpleasant-pleasant*, *typical-unique* (Osgood et al., 1957; Trofimova, 1999), and the scale *complex–simple.*

At the beginning of the survey, it was requested to provide the following information: last name, first name (if the participant wanted to take the survey anonymously, one could indicate a nickname), university, faculty, age, and FL proficiency level in accordance with CEFR (Council of Europe, 2020). Further, it was proposed to select familiar people for the "roles" presented in the Role Title list, and fill them out in the SD matrix (see Figure 1). The participant was instructed to rate people on a 6-point scale and fill out the table line by line: first put the marks in the line *sociable —aloof*, then in the line *lazy —hardworking*, etc. SPSS 23 was used for data analysis. The data was translated into English after statistical analysis. Russian-English/English-Russian dictionaries and the Collins Online English Thesaurus were used. First, the data was translated into English, then it was translated back into Russian. The original data and the back-translated data were compared, and any discrepancies in the translated version were corrected.

 doi:10.20944/preprints202511.0995.v1

Figure 1. *SD for Studying Beliefs about People Involved in FL Learning.*

Results

Semantic differential data were subjected to PCA with varimax rotation. Firstly, PCA was performed on the subsamples of participants with high and low proficiency, separately. It allowed identifying underlying basic dimensions that influence participants' beliefs about people involved in FL learning depending on the FL proficiency level. Two matrices (for subgroups of low- and high-proficiency participants) of mean estimations of subjects 17 * 15 ("constructs * characters") were analysed.

The application of the Kaiser criterion suggested extracting 6 components and 3 components for subsamples of high - and low - proficiency participants, respectively (see Appendix, Tables A1 and A2). There is a consensus among statisticians that Kaiser's criterion poses a higher risk of overextraction compared to more automated tests (Morton & Altschul, 2019). In this study, parallel analysis yielded one-factor solutions for both subsamples. As, in my view, one factor solution is not adequately comprehensive, I decided to select factors on the basis of the following rules. Firstly, a cut-off point of .55 was adopted for factor loadings based on the sample size (Hair et al., 2009). Secondly, to be considered a strong factor, there should be a minimum of three items (bipolar scales) per factor (Meyers et al., 2013). Thirdly, keep the factors that, in total, account for about 70-80% of the variance. According to these criteria, four factors and two factors were selected for the subsamples of participants with low and high FL proficiency, respectively.

For the subsample of participants with low FL proficiency, 4 principal components explaining 70,1% of the variance were selected (see Appendix, Table A1). The first component, *Diligence*, explained 32,5% of the total variance, and a total of 4 scales had significant or at least moderate contributions to this component. The second component accounted for 14% of the total variance and consisted of 3 scales with significant factor loadings. It was labelled *Remoteness*. The third and fourth components explained 13.8% and 9.8% of the total variance, respectively, and were made up of three scales each. These components were labelled *Mediocrity* and *Eccentricity and openness to experience* (Table 3).

Table 3. *Rotated Component Matrix (Low-Proficiency Participants).*

Variables - scales	Diligence	Remoteness	Mediocrity	Eccentricity and openness to experience
lazy_hardworking	,911			
emotional_levelheaded	,804			
weak_strong	,791			
selfish_selfless				
brave_cautious				
complex_simple				-,616
active_passive			,572	
arrogant_modest				
mobile_slow		,627		

 doi:10.20944/preprints202511.0995.v1

caring_indifferent		,759		
sociable_aloof			,953	
spiritless_energetic	,596			
irresponsible_responsible			,735	
typical_unique				,769
unpleasant_pleasant				
closeminded_curious				,839
friendly_distant		,776		

Rotation Method: Varimax with Kaiser Normalisation. Variables with factor loading < .55 were deleted from the table.

Two factors were selected that accounted for 79.4% of the total variance when PCA was carried out on the subgroup of participants with high FL proficiency (see Appendix, Table A2).

The first component accounted for 66% of the variance and consisted of 12 bipolar scales with significant factor loadings. The second component (accounting for 13.5% of the variance) was made up of seven bipolar scales with significant factor loadings. According to the set of scales, these components were similar to the components obtained for the subgroup of low FL proficiency participants and were labelled *Diligence* and *Remoteness* (Table 4).

Table 4. *Rotated Component Matrix (High-Proficiency Participants).*

Variables - scales	Diligence	Remoteness
lazy_hardworking	,965	
weak_strong	,940	
spiritless_energetic	,882	
typical_unique	,843	
irresponsible_responsible	,833	
active_passive	-,821	
mobile_slow	-,780	
complex_simple	-,756	
closeminded_curious	,728	-,622
emotional_levelheaded	,652	,616
brave_cautious	-,602	
caring_indifferent		,876
friendly_distant		,874

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selfish_selfless		-,799
unpleasant_pleasant	,587	-,725
sociable_aloof		,588

Rotation Method: Varimax with Kaiser Normalisation. Variables with factor loading < .55 were deleted from the table.

To describe the differences in the structure of the semantic spaces of low and high FL proficiency participants, the pool data method was used. The dummy variable added to the pooled data was the FL proficiency level. This variable allowed us to indicate the axes (more precisely, one axis) of the semantic space along which there were significant differences between two groups of participants. The matrix combining the results of two subgroups was analysed using exploratory factor analysis (PCA with varimax rotation).

The dummy variable received the highest loading in the second factor. Based on the constructs with significant or at least moderate factor loadings (see Table 5), the second factor was interpreted as *Unsociability*. The dummy variable in the first component obtained a much more insignificant factor loading than in the second factor. But the first component, labelled as *Vitality*, explained 61,6% of the total variance (see Appendix, Table A3) and consisted of scales with much more significant factor loadings in comparison to the second component.

Table 5. *Rotated Component Matrix (Pool Data Method).*

Variables - scales	Vitality	Unsociability
A_C	,126	-,917
weak_strong	,705	
sociable_aloof	-,605	,595
lazy_hardworking	,634	
emotional_levelheaded		
active_passive	-,710	,578
selfish_selfless	,738	
arrogant_modest		
mobile_slow	-,680	,619
unpleasant_pleasant	,844	
complex_simple	-,784	
brave_cautious		
caring_indifferent	-,682	
typical_unique	,850	
friendly_distant		,707

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spiritless_energetic	,880
irresponsible_responsible	,779
closeminded_curious	,949

Rotation Method: Varimax with Kaiser Normalisation.

The use of the pool data method to compare different semantic spaces allowed us to show the differences in the location of "roles" in the semantic space. The factor Unsociability was on the x-axis; the third factor, which was labelled as *Vitality*, was chosen as the y-axis. Additionally, a scatter plot based on the axes unpleasant-pleasant and *Unsociability* was constructed. In Figure 2 and Figure 3, number 1 denotes the "roles" belonging to the low FL proficiency semantic space, and number 2 belongs to the high FL proficiency one. The lines connect the location points of the same objects in the space formed by factors describing the significant differences between two subgroups.

Figure 2. *Scatter Plot Based on the Axes Vitality and Unsociability.*

Figure 3. *Scatter Plot Based on the Axes Unsociability and Unpleasant-pleasant.*

Along the axis *Unsociability*, most scatter points of the semantic space of low-proficiency participants' beliefs lied in the first and second quadrants of the scatter chart, while scatter points of high- proficiency participants' space lied in the third and fourth quadrants, indicating that high-proficiency participants tended to perceive most "roles" as more friendly, mobile, sociable, and active than low- proficiency participants did. There were no significant differences along the axis *Vitality* between high- proficiency and low-proficiency participants.

The most curious, energetic, and unique "role" for participants in both subsamples was "Person knowing a FL you would like to be like". The most closeminded, spiritless, and typical ones for participants in both subsamples were "Migrant worker" and "Convinced monolingual".

The most friendly, mobile, and sociable "role" for low FL proficiency participants was "Relative knowing a FL". The most friendly, mobile, and sociable "role" for participants with high FL proficiency was "Person whom knowledge of FL helped to find close friends, a beloved one". The most distant, slow, and aloof ones for participants with low FL proficiency were "Person whom knowledge of a FL helped to achieve career success", "Person for whom learning a FL is a hobby" and "Person who wanted to learn FL, but could not". The most distant, slow and aloof "roles" for participants with high FL proficiency were "Person for whom learning a FL is a hobby" and "Friend knowing a FL". The most pleasant and the most unpleasant ones for high-proficiency participants were "Friend knowing a FL" and "Migrant", respectively. The most pleasant and the most unpleasant "roles" for low- proficiency participants were "Person for whom learning a FL is a hobby" and "Migrant", respectively.

Additionally, correlation analysis using Spearman correlation coefficients was performed (Figure 4 and Figure 5). The correlation coefficient values of 0.7-0.9 were considered strong correlations, 0.4–0.6 moderate ones, and less than 0.3 weak ones (Dancey & Reidy, 2007). Strong, moderate, and weak correlations were marked in red, yellow, and blue, respectively. Figure 4 illustrates a clear preponderance of weak correlations in the matrix of low-proficiency participants. The correlation analysis resulted in 45 strong and 50 moderate correlations between bipolar constructs for high-proficiency participants and only 2 strong and 32 moderate correlations for low-proficiency participants.

Figure 4. *Spearman's Correlations Between Bipolar Constructs (Participants with Low FL Proficiency).*

Figure 5. *Spearman's Correlations Between Bipolar Constructs (Participants with High FL Proficiency).*

Discussion

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Two-factor and four-factor solutions were obtained for the subgroups of participants with high and low FL proficiency, respectively. The sets of constructs included in the first factors of the two subsamples are quite identical. Similarly, in the study by Nikitina and Furuoka (2018), three extracted factors (*Concentration*, *Hard work*, and *Effort*) were relevant to the process of acquiring linguistic knowledge, which necessitates the learner's effort, concentration, and hard work. In this study, this factor was labelled as *Diligence*. The scale *lazy-hardworking* has the highest loading in both factors. Apart from this scale, the dimensions of two subsamples are united by the scales *spiritless-energetic* and *weak-strong*. But the factor *Diligence* for high FL proficiency participants contains much more constructs with significant factor loadings. This indicates that dimension *Diligence* for high FL proficiency participants is more detailed and holistic. These results may suggest that participants of both subgroups perceive FL proficiency as the outcome of a strong work ethic, dedication, and perseverance, and that participants have a growth language learning mindset (Lou & Noels, 2019).

The second factor, *Remoteness*, has also some similarities for both subsamples, and both include scales caring-indifferent and friendly-distant. As in the case with dimension *Diligence*, the second factor for the subsample of participants with high FL proficiency comprises more scales with significant factor loadings in comparison with the subsample of low FL proficiency participants. Scales *sociable-aloof, irresponsible-responsible, active-passive, close-minded-curious, typical-unique,* and *complex-simple,* which are included in the two first factors for the subsample of high FL proficiency participants, are part of the third and the fourth factors for the subsample of low FL proficiency participants. The third factor, *Mediocrity,* includes the scale *sociable – aloof*, and, similarly to the second one, it is related to interpersonal communication. Referred to as *Eccentricity and openness to experience*, the fourth factor comprises the scales for distinguishing people as closeminded and curious, typical and unique, complex and simple.

Regarding the scatter plot analysis, it is shown as follows. It is noteworthy that the dispersion of "roles" is much larger in the semantic space of high FL proficiency participants, which indicates more contrasting scores given by them. The scatter plot demonstrates that both subsamples tend to perceive the object "Migrant" as monolingual, not bilingual, probably due to the low language proficiency of this "role". The scatter plot in Figure 3 shows that "Migrant" is the most unpleasant "role" in the semantic spaces of participants in both subgroups. These results are in line with previous studies that reported negative attitudes towards people with immigrant background (Asbrock, 2010; König et al., 2022; Stang et al., 2021). But the present study shows that FL proficiency level doesn't influence cross-cultural empathy and acceptance of ethnic outgroups as favourably as it was demonstrated in previous studies (Dewaele & Stavans, 2014; Mepham & Martinovic, 2018). Probably, high FL proficiency participants were negative towards migrants due to their limited proficiency in Russian, similarly as shown in the study by Mepham & Martinovic (2018). One can assume that this negative attitude toward "role" "Migrant" is linked to xenophobic feelings: according to the Levada Center survey (2019), 71% of the respondents in Russia expressed their support for the ultra-nationalistic slogan "Russia for Russians", with Romas, Chineses, Vietnameses, people of Central Asian and North Caucasian origin, Jews, and Ukranians seen as the least desirable ethnic minorities. Interestingly, the "role" "Specialist for whom Russian is a second language" was perceived quite positively by both samples, probably due to the more prestigious social status of this "role".

Regarding the changes in self-perception, participants in both subsamples perceive "role" "Myself, if I could speak a FL as a native speaker" as more friendly, curious, energetic, and pleasant than "Myself now". It is worth noting the high self-esteem of participants with high FL proficiency: both "roles" associated with self-perception were rated higher than most bilingual "roles" and even more so monolingual "roles".

What unites the beliefs of participants with high and low proficiency is their perception of the "role" "Person knowing a FL you would like to be like" as the most curious, energetic, and unique, and the "roles" "Migrant" and "Convinced monolingual" as the most closeminded, spiritless, and typical. The axis *Unsociability* is the axis along which there were significant differences between two subsamples. High FL proficiency participants perceived both bilingual and monolingual "roles" as

 doi:10.20944/preprints202511.0995.v1

more friendly, mobile, sociable, and active than low FL proficiency participants did. The axis *Vitality* contributed greatly to the differentiation between bilingual and monolingual "roles" in the semantic space of high-proficiency participants' beliefs. The participants with high FL proficiency perceived most of the bilingual "roles" as more curious, energetic, and unique than low proficiency participants did. The participants in both subsamples gave lower scores to "Convinced monolingual" than to bilingual "roles". But in high-proficiency participants' semantic space, the difference between bilingual "roles" and "Convinced monolingual" is much more significant than in low-proficiency participants' semantic space. Along the axis *unpleasant-pleasant* "Convinced monolingual" was rated much lower than bilingual "roles" in the semantic space of high-proficiency participants' beliefs. Low-proficiency participants also gave to "Convinced monolingual" a low score, but the difference between this "role" and bilingual "roles" was not as pronounced. Scatter plots (Figure 2 and Figure 3) show that in the semantic space of high FL proficiency participants, "Convinced monolingual" and "Person who wanted to learn FL, but could not" differ to a greater extent than in the semantic space of participants with low FL proficiency. This suggests that they appreciate the effort made to learn a FL to a greater extent than low-proficiency participants do. Overall, the scatter plot demonstrates that participants with high FL proficiency tend to show in-group favouritism towards bilingual "roles" and out-group bias towards monolingual ones, especially"Convinced monolingual".

Results of Spearman correlation coefficients demonstrated that there are more strong and moderate correlations between bipolar constructs in the matrix obtained for high FL proficiency participants in comparison with one obtained for participants with low FL proficiency. A few strong correlations may indicate uncertainty and a lack of clear ideas about FL learning. Kelly hypothesised that our thinking (our way of construing reality) is cyclical and shifts from disintegrated ("loose") to tight "construing" (Fransella, 2003). This study shows that the perception of people involved in FL learning by low FL proficiency participants is more disintegrated than that by high FL proficiency participants. More isolated constructs that are not associated with other constructs by strong correlations may indicate the primary stage of the formation of a new system of constructs, the fuzziness of the new system. A change in one element does not lead to a significant modification of other bipolar constructs, which may be associated with difficulties and uncertainty in interpreting the external world. Considering constructs as separate and not constituting a single, integral system of ideas can lead to ambiguous assessments and a negative attitude towards the FL learning process. Taking into account that construing is about predicting, without having a systematic basis for prediction, a person cannot holistically and steadily anticipate the actions of others and the meanings behind these actions. In turn, a more tight system is associated with more polarised or extreme perceptions, as evidenced by the location of the "roles" on the scatter plot (see Figure 2 and Figure 3).

As regards practical implications, it is important to consider intervention options that can help reduce negative attitudes toward people with immigrant background. Stereotypes and stereotype threats can have an impact on children and young people from immigrant backgrounds. Therefore, it is crucial to intervene at an early stage to minimise negative attitudes and inequalities. This intervention will help promote positive interactions between different groups within our diverse societies (König et al., 2022; Murrar et al., 2020). It would be beneficial to incorporate programs into regular school activities and tailor them to the specific in-group/out-group dynamics (such as promoting empathy and perspective-taking; Beelmann & Heinemann, 2014; Lemmer & Wagner, 2015).

Beliefs concerning language learning have been discovered to hold considerable influence over the language learner. Supportive and optimistic beliefs contribute to resolving challenges and maintaining motivation, whereas negative beliefs can cause reduced motivation and frustration. Dealing with students' negative beliefs about FL learning could imply being aware of their previous learning experience, fostering confidence, and demonstrating their achievements.

Directions for future research are based on these limitations. This study relied on participants' self-reported language proficiency. On the one hand, self-reports are considered reliable indicators

 doi:10.20944/preprints202511.0995.v1

of language performance (Marian et al., 2007); on the other hand, subjective measures seem to be inadequate estimates of language skills (Edele et al., 2015). So, future research could examine the differences in beliefs about people involved in FL learning depending on the tested FL proficiency. It should be noted that beyond self-reported FL proficiency, little is known about the language experience of participants. While the Role title list contains two types of "monolinguals", the study lacks information about the causes of participants' low FL proficiency: it could be a lack of motivation to learn a FL language, an unsuccessful attempt to learn a FL, or that these participants just started to learn a FL. The present study was conducted among participants with different proficiency levels at the same time. It might be interesting to carry out a longitudinal study on the same sample using semantic differential to study beliefs about people involved in FL learning and explore the dynamics of these beliefs. This dynamics could be investigated by considering variables such as gender, academic specialization, personality, and others. Taking into account that studies have shown a correlation between learning a foreign language and a decrease in prejudice towards native speakers of that language (Rubenfeld et al., 2007; Wright & Bougie, 2007), future research could examine whether knowledge of migrants' native languages would result in more positive attitudes towards them. Future research might involve a larger sample of participants in different cultural and linguistic contexts with learners of other foreign languages.

Conclusion

Beliefs of participants with high and low FL proficiency about people involved in FL learning were united by topics related to hard work and perseverance and different aspects of communication (sociability, friendliness). The correlation analysis using Spearman correlation coefficients showed that the perception of low proficiency participants is characterised by disintegration and uncertainty.

There are noticeable differences in the beliefs about people involved in FL learning between the two groups. These differences are in the factors *Unsociability* and, to a much lesser extent, *Vitality*. High proficiency participants perceive bilingual and monolingual "roles" as more friendly, mobile, sociable, and active compared to low proficiency participants.

As seen by the scatter plot, high FL proficiency participants exhibit in-group bias for bilingual "roles" and out-group bias toward monolingual ones. The axis *Vitality* has played a significant role in distinguishing between bilingual and monolingual "roles" in the semantic space of high-proficiency participants' beliefs. The difference between bilingual "roles" and "Convinced monolingual" is much more pronounced in the semantic space of high-proficiency participants compared to that of low-proficiency participants. The difference in perception between "Person who wanted to learn FL, but could not" and "Convinced monolingual" suggests that high-proficiency participants appreciate the effort made to learn a FL to a greater extent than participants with low FL proficiency do. The findings showed generally negative attitudes displayed by participants in both subsamples toward "Migrant worker with poor Russian skills".

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Appendix A

Table A1. *Total Variance Explained (Low FL proficiency).*

	Initial eigenvalues		
Component	Total	% variance	Cumulative % variance
1	5,531	32,538	32,538
2	2,382	14,014	46,552
3	2,339	13,761	60,313
4	1,666	9,801	70,114

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Table A2. *Total Variance Explained (High FL proficiency).*

	Initial eigenvalues		
Component	Total	% variance	Cumulative % variance
1	11,212	65,953	65,953
2	2,292	13,482	79,434
3	1,503	8,843	88,277
4	,923	5,431	93,708

Table A3. *Total Variance Explained (Pool Data Method).*

	Initial eigenvalues		
Component	Total	% variance	Cumulative % variance
1	11,082	61,569	61,569
2	1,901	10,559	72,128
3	1,449	8,051	80,179
4	1,031	5,727	85,906

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