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HUMAN MIND AND SECOND LANGUAGE ACQUISITION

Žmogiškasis protas ir antrosios kalbos išmokimas

SANTRAUKA

Šiame straipsnyje nagrinėjami užsienio kalbos išmokimo efektyvumą lemiantys veiksniai, didinantys sėkmingą ir organišką gebėjimą komunikuoti negimtąja kalba. Užsienio kalbų išmokimo sėkmė priklauso nuo daugelio veiksnių, kuriuos sąlygoja žmogaus protas. Pagrindiniai sėkmę lemiantys faktoriai yra žmogaus intelektas, gabumai, asmenybė bei motyvacija. Didelę įtaką turi mokymo(-si) strategijos, stilius bei individualūs skirtumai. Straipsnyje analizuojami užsienio kalbų išmokimo teoriniai ir eksperimentiniai tyrimų duomenys. Pagrindiniai nagrinėjami aspektai yra Gardnerio intelektų teorija; skystas ir kristalizuotas intelektas, praktinis ir emocinis intelektas; informacijos apdorojimo procesai; fenomenologija, kuri tiria klasikinį ir operantinį mokymą; įvairios asmenybės įtakos teorijos; gabumų konstrukcijos; motyvacija ir svarbios besimokančiųjų kognityvinės charakteristikos.

SUMMARY

The article examines the diversity of scientific approaches to second language acquisition (SLA). Success in language attainment depends on a variety of factors that are determined by the human mind. The most important factors are multiple intelligences, learner aptitude to languages, learner personality and motivation, as well as some individual differences such as anxiety, self-esteem and willingness to learn. Appropriate learning strategies and styles are also beneficial for success in learning. The article looks over research data on theoretical and experimental aspects of second language acquisition. They include: Gardner's theory of multiple intelligences, fluid and crystallized intelligence, practical and emotional intelligence, information-processing approaches; phenomenology which deals with classical and operant conditioning; various approaches to personality; SLA stages and aptitude constructs; language learning styles and strategies; motivation, and important individual learner characteristics that are relevant to successful outcome in learning.

INTRODUCTION

Second language acquisition is a demanding task. It is well known that people differ in second language attainment success. For a long time, scientists have been trying to explore the general principles of the human mind with the aim of understanding how people learn. Success in learning depends on number of components. The most important are thought to be learner intelligences, aptitude, motivation, and personality. The topic under consideration covers the theoretical issues of interrelated intelligence, personality, motivation, aptitude, learning styles, and learning strategies. The most common experiential materials describe various tests which allow to estimate future learner progress. Some learner individual differences such as anxiety, self-esteem, creativity, and willingness to communicate are important to account for successful language learning.

INTELLIGENCE

The term "intelligence" can take on many different meanings. Each concept of intelligence is reasonable. It might represent an instance in which more intelligent people are better to use resources of the environment than are less intelligent people.

Psychologists for years tried to deal with the issue of devising a general definition of intelligence. Westerners view intelligence as the ability to form categories and debate rationally, while Easterners view it in terms of understanding and relating one another[1]. The definition of "intelligence" that psychologists employ is "the capacity to understand the world, think rationally, and use resources effectively when faced with challenges"[2]. In some early theories of intelligence there was the single, general g-factor for mental ability, which was thought to underlie performance in every aspect of intelligence[3].

Research by R. B. Cattell[4] is best known for the distinction between fluid and crystallized intelligence. Fluid intelligence reflects information processing capabilities, reasoning, and memory. Crystallized intelligence reflects the accumulation of information, skills, and strategies that are learned through experience and can be applied in problem solving situations.

GARDNER'S THEORY OF MULTIPLE INTELLIGENCES

Introduced by Howard Gardner in the 20th century, the multiple intelligence (MI) theory has become very popular among foreign language teachers. It is related to the basic needs of language practitioners who try to create effective teaching instruction. It allows promoting understanding and appreciation among students to create classrooms, which help foster learner's self-esteem and self-motivation. The creative application of MI theory helps to meet

the needs of different types of learners. Teachers can apply human diversity for better teaching and learning.

Howard Gardner defined the first seven intelligences in his famous book "Frames of mind" in 1983, and he added two more intelligences later in 1999. Currently it is believed that each individual has nine intelligences: 1) Verbal-Linguistics Intelligence, i.e. well-developed verbal skills and sensitivity to the sounds, meanings and rhythms of words; 2) Mathematical-Logical Intelligence, i.e. ability to think conceptually and abstractly, and capacity to discern logical or numerical patterns; 3) Musical Intelligence, i.e. ability to produce and appreciate rhythm, pitch and tune; 4) Visual-Spatial Intelligence, i.e. capacity to think in images and pictures, to visualize accurately and abstractly; 5) Bodily-Kinaesthetic Intelligence, i.e. ability to control one's body movements and to handle objects; 6) Interpersonal Intelligence, i.e. capacity to detect and respond appropriately to the moods, motivations and desires of others; 7) Intrapersonal Intelligence, i.e. capacity to be self-aware and in tune with inner feelings, values, beliefs and thinking processes; 8) Naturalist Intelligence, i.e. ability to recognize and categorize plants, animals and other objects in nature; 9) Existential Intelligence, i.e. sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life, why we die, and how we got here. The existential intelligence was described by the MI theory much later and is omitted from all contemporary MI tests[5].

Gardner's theory (1993)[6] regards the human mind as possessing different features of cognition. The author proposes a pluralistic view of the human mind, which has many different facets of cognition, and acknowledges that people have different learning styles. Each person has a different intelligence profile. However, such a profile is by no means a permanent fixture and might undergo change and development under supervision or through new experiences. In Gardner's view (1999)[7], learning is both a social and psychological process. When students understand the balance of their own multiple intelligences, they begin, first, to manage their own learning and, second, to value their individual strengths.

Novel contributions to understanding intelligence are made by cognitive psychologists who introduced an information processing approach, which examines the processes involved in producing intelligent behaviour[8]. The speed of information processing may underline differences in intelligence[9].

According to R. Sternberg[10] there is the so called practical intelligence which is related to overall success in living. People with high practical intelligence can learn general principles and apply them well. Moreover, R. Sternberg emphasizes two interrelated types of successful intelligence: analytical and creative. Some psychologists believe that the concept of intelligence includes emotions. Emotional intelligence is a set of skills that include the accurate assessment, evaluation, expression and regulation of emotions[11] The overview of various approaches is shown in Table 1.

Table 1. *Major Approaches to Intelligence* (After R. Feldman, 2009, p. 291).

Approach	Characteristics
Fluid & crystallized intelligence	Fluid intelligence relates to reasoning, memory, information-processing capabilities; crystallized intelligence relates to information, skills, and strategies learned through experience
Gardner's multiple intelligences	Nine independent forms of intelligence
Information-processing approaches	Intelligence is reflected in the ways people store and use material to solve intellectual tasks
Practical intelligence	Intelligence in terms of non-academic career, and personal success
Emotional intelligence	Intelligence that provides an understanding of what other people are feeling and experiencing and permits them to respond appropriately to others' needs

INTELLIGENCE TESTS

Psychologists devised various tests to identify people's intelligence. The first intelligence test was developed by the French psychologist Alfred Binet, who designed the test to identify the 'dullest' students in the school. Assigning a mental age to students provided an indication of their general level of performance. The 'mental age' is defined as the average age of individuals who achieve a particular level of performance on a test[12]. Later the 'intelligence quotient', or IQ, was formulated as "a score taking into account an individual's mental and chronological ages".

The average and most common IQ score is 100, and 68% of all people are within a 30-point range centred on 100[13] (Feldman, 2009, p.294). In other words, IQ scores form a bell-shaped distribution. Approximately two-thirds of the population scores between IQ=85 and IQ=115. About 5% scores above IQ=125. IQ scores are used for educational placement, assessing cognitive abilities, and evaluating job applications. R. Lynn & T. Vanhanen[14] conducted studies in 80 countries to find out which had the highest IQ. It appeared that in Hongkong the highest score was 108, in South Korea and Singapore it was 106, and in Japan and China it was 105. In Lithuania it is 91. IQ scale is available online[15]. According to it, IQ over 140 means genius, between 120-140 – very superior intelligence, 110-100 is superior intelligence, 90-100 – average intelligence, 80-89 – dullness, 70-79 – borderline deficiency in intelligence, under 70 – feeble mindedness. The IQ of some famous people over the ages can be found on the website[16]. Here are the scores for some of them: Albert Einstein 160, Benjamin Franklin 160, Bill Gates 160, Leonardo do Vinci 220, Johann Wolfgang von Goethe 210, Charles Dickens 180, Isaac Newton 190, Gottfried W. von Leibniz 205.

There is the number of contemporary IQ tests, which are relatively difficult and time consuming to administer. The concept of MI led to the development of intelligence tests, which could be administered either on the paper or online. Moreover, educators designed classroom curricula to draw on different aspects of intelligence[17].

There are two important tests that are relevant to the issue of classroom learning. One is known as the *achievement* test, which is designed to determine a person's level of knowledge in a specific subject. Another test is known as an *aptitude* test, which is designed to predict a person' ability in a particular area of work[18].

Due to the recent advantages of IT, standard computer testing has been developed. Tests are individualized: questions are viewed, answered and assessed online.

Summing up the above references on the types of intelligence and its testing it might be concluded that though the variety of tests is available it is very hard to measure individual's intelligence. The key reason is that tests are based on learner self-reported answers. For successful teaching of the second language the language practitioner should administer multiple intelligences test as well as achievement and aptitude tests to students in order to follow their progress and be able to apply the best possible teaching techniques.

PHENOMENOLOGY

'Phenomenology' as the branch of philosophy that concentrates on what is perceived by the senses in contrast to what is independently real or true about the world attempts the objective study of topics usually regarded as subjective, such as consciousness and judgments, perceptions, and emotions.

Lately phenomenology has become an issue of psychology research due to the interest in learning and consciousness. Consciousness is the awareness of the sensations, thoughts, and feelings that people experience at a given moment. It provides subjective understanding of both environment around us and our private internal world[19].

Psychologists approached the study of learning from several angles. It is known that Ivan Pavlov developed the principles of classical conditioning, defined as "a type of learning in which a neutral stimulus comes to bring about a response after it is paired with a stimulus that naturally brings about that response"[20]. The principles of classical conditioning explained many aspects of human behaviour. Emotional responses are likely to be learned through the processes of classical conditioning, which accounts for pleasant and unpleasant experiences.

The term "operant conditioning" means "learning in which a voluntary response is strengthened or weakened depending on its consequences"[21]. The central concept of operant conditioning is reinforcement, i.e. the process by which a stimulus increases the probability that a preceding behaviour will be repeated.

Cognitive learning theory suggests that learning focuses on the thought processes. Two types of learning are known –

latent and observational learning[22]. In latent learning a new behaviour is learned but not demonstrated until some incentive is provided for displaying it. Observational learning occurs by observing the behaviour of another person.

UNDERSTANDING LANGUAGE ACQUISITION

According to the learning theory, language acquisition follows the principles of reinforcement and conditioning. Another theory, known as nativism approach to language development, is that a genetically determined, innate mechanism directs language development[23]. Noam Chomsky[24] argued that humans are born with an innate linguistic capability. All the world languages share a common universal grammar. There is evidence that some sites within the brain are tied to language.

To reconcile the differing views, some theorists take an interaction approach to language development, according to which it is produced through a combination of genetically determined predispositions and environmental circumstances. Teaching with linguistic variety suggests bilingual education. Evidence shows that ability to speak two languages provides significant cognitive benefits over speaking a single language. Moreover, bilingual speakers are more creative and flexible in problem solving[25].

It is believed that language acquisition depends on individual differences (ID) which refer to personal characteristics of a learner. The person who first studied IDs was the French psychologist Alfred Binet. He became interested in IDs because of the different ways that his daughters solved problems. In 1895, he published the article on individual psychology and systemized its aims, scope and methods. Later the Binet-Simon intelligence scale was devised to separate slow and fast learners. The popularity of intelligence testing spread leading to classical testing theory which was applied to test personality, attitudes, cognitive aptitudes, etc. In the middle of the 20th century, differential psychology appeared and ID research became an important area within psychology. It has been observed that there is a wide variation among language learners in success of mastering a foreign language. IDs like language aptitude and learning motivation were researched by the number of scientists[26]. Language learning strategies were included into learner ID[27], followed by learning styles. In psychology, IDs are usually interpreted as differences in personality and intelligence. In learning, IDs are considered in a broader way, because it is necessary to include ability / aptitude, motivation, learning styles and strategies.

PERSONALITY FACTORS THAT DETERMINE SECOND LANGUAGE ACQUISITION

Personality represents personal characteristics that account for consistent patterns of feeling, thinking, and behaving[28]. 2,000 years ago Hippocrates de-

scribed four personality types: phlegmatic, sanguine, choleric and melancholic. Since then, the number of research publications has increased exponentially.

Sigmund Freud developed psychoanalytic theory in the 1900s. It became the classics of psychology. He argued that much of human behaviour is motivated by the unconscious, a part of personality that contains the memories, knowledge, beliefs, feelings, drives and instincts. According to Freud[29], personality consists of three separate interacting components: the **id**, the **ego**, and the **superego**. The id is the unorganized inborn part of personality. It operates according to the reality principle, in which the goal is the reduction of tension and the maximization of satisfaction. The ego strives to balance the desires of the id and the realities of the world. It operates according to the reality principle: it makes decisions, controls actions, and allows thinking and problem solving. The superego represents the rights and wrongs of society, includes the conscience, and helps to control impulses from the id.

Carl Jung[30] suggests that we have a universal unconscious, a common set of ideas, feelings, images, and symbols that we inherit. This collective unconscious is shared by everyone.

Trait theory of personality seeks to explain the consistencies in individuals' behaviour. Gordon Allport compiled a dictionary containing 18,000 separate terms that could describe the personality[31]. The best known is the Big Five personality traits. Researchers identified a set of five factors that underline personality. They include openness to experience, conscientiousness, extraversion, agreeableness, and neurotism (emotional stability). It is now accepted that the Big Five represent the best description of personality traits. Trait approaches have several virtues. They provide a clear, straightforward explanation of people's behavioural consistencies.

As far as learning is concerned, personality is simply the sum of learned responses to the external environment. B. F. Skinner[32] claims that personality is a collection of learned behaviour patterns. Humans keep changing through the process of learning new patterns. This approach ignores internal things such as thoughts, feelings, and motivations. However, social cognitive approaches emphasize the influence of cognition, in particular, observational learning[33]. Self-efficacy, believe in one's personal capabilities is important for attaining goals and achieving success. The term "self-esteem", the component of personality, includes our positive and negative self-evaluations. Low self-esteem usually leads to high anxiety and actual failure in performance.

Biological and evolutionary approaches to personality suggest that important components of personality are inherited.[34] However, genes cannot be viewed as the sole cause of personality. Humanistic approaches to personality are described by theories that emphasize people's innate goodness and desire to achieve higher levels of functioning[35]. According to C. Rodgers[36], all people have a fundamental need for self-actualization, i.e. a state of self-fulfilment in which to realize the highest potential.

Humanistic theories have been important in highlighting the uniqueness of human beings.

In spite of the variety of multiple approaches to personality, i.e. 1) Psychodynamic (Freud, Jung, Adler)), 2) Trait (Allport), 3) Learning (Skinner, Bandura), 4) Biological & Evolutionary, 5) Humanistic (Rogers), none of the theories provide the accurate description of personality. The multiple perspectives of personality are summarized in Table 2.

Table 2. *Comparing Approaches to Personality* (after R. Feldman, 2009, p. 467).

Theoretical Approach	Conscious vs. Unconscious	Nature (Hereditary Factors) vs. Nurture (environmental Factors)	Free Will vs. Determinism	Stability vs. Modifiability
Psychodynamic	Emphasizes the unconscious	Stresses innate, inherited structure of personality	Stresses determinism, the view that behaviour is directed and caused by factors outside one's control	Emphasizes the stability of characters throughout a person's life
Trait	Disregards both conscious and unconscious	Approaches vary	Stresses determinism, the view that behaviour is directed and caused by factors outside one's control	Emphasizes the stability of characters throughout a person's life
Learning	Disregards both conscious and unconscious	Focuses on the environment	Stresses determinism, the view that behaviour is directed and caused by factors outside one's control	Emphasizes the stability of characters throughout a person's life
Biological & Evolutionary	Disregards both conscious and unconscious	Stresses the innate, inherited determinants of personality	Stresses determinism, the view that behaviour is directed and caused by factors outside one's control	Emphasizes the stability of characters throughout a person's life
Humanistic	Stresses the conscious more than unconscious	Stresses the interaction between both nature and nurture	Stresses the freedom of individuals to make their own choices	Stresses the personality remains flexible and resilient throughout a person's life

The age of students is also a major factor about how and what to teach. People of different ages have different needs, competences, and cognitive skills[37]. Children are believed to learn languages faster than adults. Adults have many barriers to learning because of the slowing effects of ageing and their past experiences. However, these stereotypes might be misleading. Each student is an individual with different experiences and much depends upon learner differences which deal with language aptitude, learning styles, learning strategies, motivation, learner characteristics.

Language aptitude. According to Harmer, adult learners usually have a clear understanding of why they are learning. They are able to sustain a level of motivation, but they might be critical of teaching methods or worry about their diminishing intellectual powers[38].

Some students are better at learning languages than others. According to P. Skehan[39], exceptional students have good memory for retention of knowledge. Traditional aptitude tests may discriminate between the most and the least capable students. However, students become demotivated if they score badly in aptitude tests. Language aptitude is related to the concept of human abilities. According to R. J. Sternberg[40], ability tests predict about 25% of individual difference variation in performance. In language learning, aptitude is traditionally considered as a key factor of IDs. Aptitude is a strong predictor of academic success.

In the middle of 20th century, the MLAT (Modern Language Aptitude Test) was popular. It was a paper-and-pencil test and it contained five parts. Later Pimsleur's PLAB (1966) was developed. According to J. B. Carroll[41], language aptitude comprises 4 abilities: phonetic coding, grammatical sensitivity, rote learning ability and inductive learning ability. P. Pimsleur emphasized 3 factors: verbal intelligence, motivation, and auditory ability. Although later a lot of new tests were developed, it proved the adequacy of a "one-test-fits-all" practice. Some researchers studied relationship between language aptitude and intelligence, but this issue is still far from being settled. The theory of successful intelligence and its implications for language aptitude testing needs more research. The latest test of L2 learning aptitude is known by CANAL-FT name[42]. It measures how people cope with novelty and ambiguity in their learning.

Research into the relationship between language aptitude and working memory proved very promising. Working memory involves a storage and manipulation of information, i.e. our capacity for thinking and language processing[43]. Table 3 suggests research (shown by italics) in areas where new aptitude tests could be developed.

It may be concluded that language aptitude research is one of the most promising areas. One direction might include its combinations with other Individual Differences. Another area might be a link between language aptitude and working memory.

Learning styles. Researchers have tried to describe student learning styles identifying individual behaviour. K. Willing[44] produced 4 descriptions of learners,

namely, convergers, conformists, concrete and communicative learners. Convergers prefer to avoid groups, are independent and confident in their own abilities. Conformists are dependent on teacher and work in non-communicative classrooms. Concrete learners are interested in language use and communication and like group-work. Communicative learners are confident and willing to take risks, interested in social interaction.

The standard definition of 'learning styles' is "an individual's natural, habitual, and preferred ways of processing and retaining new information and skills". In other words, learning styles present person's approach to learning, i.e. show personal priorities. This term is very often replaced by a notion of cognitive styles. R. Riding & S. G. Rayner[45] compiled a list of the major cognitive style constructs, which include the wholistic-analytic dimension and the verbal-imagery dimension.

Kolb D. A., et al.[46] model of learning styles includes two dimensions: concrete vs. abstract thinking and active vs. reflective information processing.

Sensory preferences like 'visual', 'auditory', 'kinaesthetic' are familiar to language students and teachers. According to R. Oxford[47], between 50% and 80% of learners are predominantly visual. Successful learners often use different sensory preferences. Assessing language learning styles has become very common. There have been quite a few published questionnaires. The most popular and easy to administer is a learning style survey by R. Oxford[48].

Although the concept of learning styles is important in theoretical re-search, its practical value seems to be problematic. Learning styles mismatches are at the root of many learner difficulties. They include students' learning and teachers' teaching styles, language tasks, learning strategies and learner abilities. Research recommends a time management for a teacher to deal with: students need different time to cope with tasks. Another recommendation is to involve students in planning tasks and giving less control in their learning [49].

Learning strategies. Language learning strategies are "the learning processes that are consciously selected by the learner"[50]. According to R. Oxford, "learning strategies refer to specific actions, behaviors, steps, or techniques that students use to improve their own progress in developing skills in a second language by facilitating the internalization, storage, retrieval, or use of the new language". Language learning strategies were thoroughly analyzed by O'Maley & Chamot[51] and Wendin[52].

R. Oxford's taxonomy of language learning strategies consists of 6 strategies: cognitive, memory, metacognitive, communication, affection, and social. The taxonomy proposed earlier by O'Maley & Chamot is similar. Therefore, their strategy systems are compatible and can be summarized by four components: cognitive, metacognitive, social and affective strategies.

The assessment of learning strategies is conducted by self-report questionnaires. Z. Dörnyei describes four most common surveys: 1) Motivated Strategies for Learning Questionnaire MSLQ, 2) Strategy Inventory for Language Learning SILL; 3) Language Strategy Use

Inventory & Index LSUI; 4) Self-Regulating capacity in Vocabulary Scale SRCvoc.

An empirical research into learners' preferred language learning strategies in English for Specific Purposes was conducted to examine if the strategies might be relevant to lifelong learning[53]. Learners believe that it is useful to employ translation from L1 into L2 and vice versa, use a dictionary to check the meanings of unknown vocabulary, and reflect on their learning progress.

It should be noted that "learning strategies constitute a useful tool kit for active and conscious learning and pave the way toward greater proficiency, learner autonomy, and self-regulation, which is still rather sketchy, lacking real integration"[54].

Motivation. Motivation is essential to success in life. It is often understood as a kind of internal drive which pushes a person to act to achieve something. There is an accepted distinction between extrinsic and intrinsic motivation. Extrinsic motivation is caused by outside factors, while intrinsic motivation comes within the individual.

The concept of motivation in psychology was described by Feldman and means "factors that direct and energize the behaviour of humans". Instincts, inborn patterns of behaviour are determined biologically. Originally, motivation was based on instincts, but newer theories replaced this attitude.

Drive-reduction approach of motivation suggests that a lack of some biological requirements produces a drive to obtain it. A drive is a motivational arousal that energizes behaviour to fulfil a need. Basic drives like hunger, sleep, thirst, and sex, are known as primary drives. Secondary drives have no biological background, they might be achievements and experience.[55]

A novel research tendency is the second language motivation. Language practitioners are aware of students' interest decline and drop in motivation during academic year. The changing nature of 2nd language motivation is documented by Dörnyei, who emphasizes that "examining the temporal progression of L2 motivation is a potentially fruitful research direction".

Learner characteristics. There are five learner characteristics which are important for successful language learning. They are: anxiety, creativity, self-esteem, learner beliefs, and willingness to communicate.

Language anxiety affects performance in second language acquisition. According to Z. Dörnyei[56], there are the number of empirical studies that reveal a negative influence on foreign language performance. R. Oxford argues that language practitioners have no clear understanding of the circumstances when anxiety might be helpful. It is believed that further research is needed to resolve issues related to language anxiety.

Creativity seems to be hard to define, although, in accordance to the Oxford Advanced Learner's Dictionary, "it is the ability to produce new and original ideas and things". Creativity is part of educational psychology.

Communicative foreign language learning activities often require some creative thinking and can affect learner contribution to learning tasks. A. Albert & J. Kormos[57] found a positive relationship

between creativity and learner performance. They examined how the three aspects of creativity – originality, flexibility, and fluency – affected performance.

A few years ago published paper discussed how language learning tasks can be transformed into creative tasks[58]. Tan Bee Tin proposed two conditions that facilitate creativity: the use of multicultural experiences and constraints. It involves the need for humans to innovate and use language to construct new meaning. Further research into learner creativity might be fruitful.

Self-esteem is closely related to the concept of self-confidence. In accordance to the Oxford Advanced Learner's Dictionary, it is defined as "a good opinion of one's own character and abilities". However, such definition might be misleading because self-esteem may vary depending on which it is assessed. In other words, the same person can have high and low level of self-esteem. The question if self-esteem promotes learning remains to be researched as there are very few empirical studies. As an example, an empirical research by J. C. Valentine et al.[59] can be cited, where some correlations were found between self-beliefs and students' performance.

A well-known self-report questionnaire is often used to estimate learner beliefs. It is named BALLI, the Beliefs About Language Learning Inventory. It allows assessing students' beliefs in 1) difficulty of language learning, 2) language aptitude, 3) the nature of language learning, 4) learning and communication strategies, and 5) motivation expectations.

Y. Mori[60] (1999) reduced the number of beliefs to three: 1) difficulty of language learning, 2) strategies for language learning, and 3) the source of linguistic knowledge. Dörnyei claims that research into learner beliefs is a valuable means of raising awareness of language learning.

A construct called 'Willingness To Communicate' (WTC) appeared in the 1990s. WTC is a stable personality trait in one's first language. However, the low level of L2 proficiency and communicative competence might prevent learner from using a second language in communication. A complex schematic representation of the WTC was proposed by P. D. MacIntyre et al. and is reproduced in Dörnyei book. Further research might investigate the relationship between WTC and language skills of speaking, listening, reading and writing.

CONCLUSIONS

The enhancement of the second language acquisition depends on a variety of factors. Among them testing learner multiple intelligences and employment of achievement tests to monitor learner progress are of great significance. Learner language aptitude tests might also be administered as a way of predicting learner success. Besides, to ensure a good quality of second language acquisition it is essential to obtain learners' feedback on their favorite learning styles and strategies. Finally, potentially fruitful research directions might be: examin-

ing the progress of foreign language learner motivation, investigating aspects of learner creativity in foreign language learning, and observing willingness to actively get involved in second language communication.

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