

Cognitive Factors in Language Acquisition: Transfers, Interference, Generalization and Aptitude, Intelligence

Abdufattoyeva Mohina

Fergana State University Faculty Of Foreign Languages And Literature English Language
Department 2nd Course Student Of Group 22/151

Abstract: The article about cognitive in language learning, which consists in the interaction of all participants in the educational process: teachers and students This study aimed to identify the factors that affect first language acquisition for its native speakers.

Key points: Cognitive factors, transfer, Interference, generalization, Meta-cognitive strategies, positive transfer, negative transfer, aptitude, intelligence.

There are many cognitive factors that affect language learning. Among the cognitive factors, there are memory, attention and awareness, forgetting, and context or environment in which the learning process takes place. Memory plays a part in bringing about a higher or lower level of language mastery.

This study aimed to identify the factors that affect first language acquisition for its native speakers. It also aimed to investigate the effect of cognitive factors, and meta-cognitive strategies on second or foreign language learning. Participants of the study-30 EFL fourth-year students (English majors)-are drawn from the Faculties of Arts, Suez Canal University. They were exposed to a questionnaire, which consists of 30 items covering three dimensions including: (1) factors affecting first language acquisition, (2) cognitive factors affecting language learning, and (3) metacognitive strategies affecting language learning.¹ Based on the study results, it is concluded that the innate ability and social experience or surrounding environment are factors affecting first language acquisition. Cognitive factors including memory (its forms and types), attention and awareness, and forgetting, affect second or foreign language learning. Meta-cognitive strategies, such as planning, self-monitoring, self-evaluation, and setting priorities also play a significant role in language learning.

This is a discussion on the role that cognitive and affective variables play in second language learning. The variables under consideration are: (1) intelligence; (2) language aptitude; (3) motivation; and (4) anxiety. Specifically, this report focuses on the importance of attitudinal and motivational factors in achievement. Research is reviewed which supports the contention that the attitudinal motivational dimension, or integrative motivation, bears an important relationship to achievement in the second language as well as to behavior in the language classroom. The importance of such a motivational component seems to derive from the fact that language courses make affective demands on students because they require acquisition of material characteristic of other cultures, demands not made by other school subjects. It is suggested that educators concerned with communicative methodology consider the importance of attitudinal and motivational variables.

¹ Brown, D. 1994. Principles of Language Learning and Teaching (Third Edition). New Jersey, page 90, paragraph 2

Transfers have a positive effect on the learning process, but interference and over-generalization slows down this process. The more practiced the learner is, the less likely he is to make these mistakes due to the latter two causes.

Transfer, Interference, and overgeneralization. It is a general term describing the carryover of previous performance or knowledge to subsequent learning.²

There are two types of transfer

- ✓ Positive transfer
- ✓ Negative transfer

Interference

Positive transfer is based on identical points between source and target language which benefits easier acquisition of second language owing to its similar characteristics with mother tongue.

Positive transfer is based on identical points between source and target language which benefits easier acquisition of second language owing to its similar characteristics with mother tongue.

For example, word order in both English and French is on the basis of Subject + Verb+ Object which encourages language learners to easily acquire this structure and apply them in their language performance:

It is common for SLT to emphasize on the role of interference –

The interfering effects of the native language on the target language (second language). Some people viewed second language learning as exclusively involving the the overcoming of the effects of the native language. People will use whatever knowledge that they had in language to facilitate the second language learning process.

Generalization

It is important in human learning the second language.

To generalize means to infer or derive a law, rule. Or conclusion, usually from the observation of particular instances.

Generalization = Ausubel concept of meaningful learning

Meaningful learning is generalization: items are generalized under higher order categories for meaningful retention³

Examples of generalization:

- The learning of concepts in early childhood is a process of generalization.
- A child who has been exposed to various kinds of animals gradually acquires a generalized concept of “animal”.
- In this stage, a child may generalize his or her familiarity with dogs see a horse for the first time and overgeneralize the concept of “dog” and call the horse a dog.
- They might generalize other similar animals as dogs until the the general attributes of a larger category which is “animal” have been learned.

Generalization in SLA

In SLA, it is a process that occurs as the second language learner acts within the target language, generalizing a particular rule or item in the second language.

² Krashen, S.2002. Second Language Acquisition and Second Language Learning. University of Southern California, page 7, paragraph 2.

³ Leaver, B. L., M. E. Ehrman, and B. Shekhtman.2005. Achieving Success in Second Language Acquisition. Cambridge University Press, page 148, paragraph 2, and page 152, paragraph

For example, Children in learning English as a second language overgeneralize regular past tense endings (walked, opened) as applicable to all past tense forms (goed, flied).

Until they recognize a subset of verbs that belong in an irregular category. Overgeneralization is committed by learners of English from almost any native language background.

In conclusion, the process of transfer, interference, and overgeneralization between L1 and L2 performance are merely “falling back” to the existence of errors. Interference from L1 to L2 is simply because of the generalizing the L1 experience and then apply them in an incorrect way. Otherwise, overgeneralization occurs because of ignoring some exceptions of L2 rules. The existence of the errors can be considered as the indication of mother tongue influences and the lack of vocabulary in L2.

Intelligence is a general measure of an individual's overall ability to learn and understand, while aptitude is a specific measure of an individual's ability to perform a particular task or activity.⁴

That depends what you're recruiting for. If you want to be sure of hiring a very clever candidate, you might want them to sit an IQ test. But if you want to hire someone who can join your business and quickly grasp the requirements of the role, adapt to new challenges and drive change through the organisation then you'll want a candidate with a high level of aptitude.

Similarly, we can't think of a situation when you might go looking for a particularly unintelligent person to join your team. But certain roles might suit an employee who displays low aptitude – perhaps a very methodical or repetitive role.

Difference between Intelligence and Aptitude

While intelligence is the ability of an individual to gain knowledge and understand cumbersome situations, aptitude can be defined as the capacity to apply the same knowledge. For example, a person may be intelligent enough to gain knowledge about military, navy, and air force or defense related matters; but may not possess an aptitude to practice the same effectively in his/her real life.

While intelligence measures the general mental ability of an individual, aptitude measures the abilities and capacities related to specific fields. For example, an intelligent person may have knowledge related to diverse fields like engineering, medicine, administration, politics, etc; but he/she may have the capacity to practice only one of the fields effectively in the real life.⁵

Importance of Aptitude and Intelligence in life of civil servants

For a civil servant the Intelligence and aptitude forms the supporting pillars in his task of serving the people effectively. Recently a civil servant narrated an incident on how he dealt with a politician who was pressuring him to favour his supporters in a procurement process.

He narrated the provisions of prevention of corruption act and the potential of the right to information act to the politician and convinced him that flaunting of rules will be detrimental to both civil servant and the politician.

Incidents like this are a common phenomenon of the Indian society. Knowing the intricacies of the prevention of corruption act and right to information was the indication of the intelligence of the civil servant. The ability to use these provisions to persuade the politician is the hallmark of his aptitude. Aptitude helped him to use the acquired knowledge to set the things in order according to rule of law without getting into confrontation.

Aptitude and intelligence are not binary opposites. Aptitude comes with interest and passion for a subject, while intelligence is the mental capacity to understand and gain the knowledge.

⁴ Irgashev M.U. The role of english vocabulary in the field of innovative technologies and cognition for the students in modern educational system

⁵ Usmonova Sh.R. The use the technology of critical thinking and the progress of the student in cognitive activity

REFERENCES

1. Brown, D. 1994. Principles of Language Learning and Teaching (Third Edition). New Jersey, page 90, paragraph 2.
2. Krashen, S.2002. Second Language Acquisition and Second Language Learning. University of Southern California, page 7, paragraph 2.
3. Leaver, B. L., M. E. Ehrman, and B. Shekhtman.2005. Achieving Success in Second Language Acquisition. Cambridge University Press, page 148, paragraph 2, and page 152, paragraph
4. Irgashev M.U. the role of english vocabulary in the field of innovative technologies and cognition for the students in modern educational system
5. Usmonova Sh.R. The use the technology of critical thinking and the progress of the student in cognitive activity

Internet resources

1. <https://www.mdpi.com/2226-471X/8/1>
2. [http://www.scholarpedia.org/article/Language_\(linguistics\)](http://www.scholarpedia.org/article/Language_(linguistics))
3. <https://www.scholarshipportal.com/articles>