INFLUENCE OF AFFECTIVE FACTORS ON LEARNING ABILITY IN SECOND LANGUAGE ACQUISITION

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Abstract

Second language acquisition (SLA) is a complex psychological process. According to educational psychology, the learning outcome of the SLA is greatly influenced by the affective factors of the learner, such as motivation, attitude, anxiety, and empathy, to name but a few. This paper mainly explores how the affective factors influence the learning ability in the SLA. A total of 200 second language learners were selected for the research. By the random number table method, the subjects were divided evenly into four groups: junior high school group, senior high school group, college group, and postgraduate group. Each group has 25 males and 25 females. The learning ability of the subjects were measured by a questionnaire survey, which covers six aspects: learning motivation, attitude, anxiety, empathy, inhibition and personality. Through the analysis on the survey data, it is found that the subjects in different age groups differed greatly in how the affective factors influence the SLA; affective factors greatly impact the cognition of cultural differences by second-language learners; the affective filter hypothesis has important practical significance for the SLA. The research results provide a reference for the teaching design of SLA for different groups of learners.

Key words: Affective Factors, Second Language Acquisition (SLA), Language Learning, Affective Filter Hypothesis.

INTRODUCTION

Second language acquisition (SLA) as an independent discipline, is the process by which people learn a second language learning. It is an extremely complex language process, psychological process, physiological process, and even social process (Lenahan, 2015), involving many factors such as the learning environment, the learner factors, the acquisition process, and the relationship between language itself and language acquisition. In recent years, in terms of learner factors, many linguistic theoretical researchers and foreign language teachers have paid more attention to the influence of affective factors on SLA and have also made in-depth researches and explorations from different angles and aspects. It’s all expected to provide helps to the SLA mainly from the psychological perspective of the learner so that the learner can obtain theoretical guidance and psychological support in the process of SLA (Ionin, 2017). The affections mentioned in foreign language learning involve the two aspects of humans, namely the personality factors and people's feelings about themselves (Rastelli, 2018).

Affections have the functions of stimulating, motivating, regulating, infecting and empathizing in human cognition; among them, stimulating function and dynamic function are especially important in the process of SLA. The intellectual behaviours such as feeling, perception, memory, imagination, and thinking of learners belong to the operating system of cognitive activities (Selvi & Martin-Beltrán, 2016). The state of the operating system is...
influenced by affective factors; positive affective factors will make this system work in the best state. Affective non-intellectual factors such as interest, will and personality belong to the dynamic system in language cognitive activities, which affects the efficiency of language learning (Truscott, 2017). The process of SLA is influenced by many factors, such as the language learning environment, learning mode, learning methods and strategies, learning language, and differences in thinking between the two languages especially the affective factors of the instructors and learners themselves. Studies have shown that human affections are closely related to cognitive processes and any cognitive process is accompanied by certain affections; meanwhile, affections play a positive and negative role in human cognitive behaviour (Ramazani, Aghajani, Alipanahi et al., 2013).

This paper attempts to explore the influence of affective factors on learners’ SLA ability. For this, 200 second language learners were selected as study objects, and divided them into four groups according to the random number table method: junior high school group, senior high school group, college group and postgraduate group with 50 students in each group (25 male and 25 female learners). Then, it designed the questionnaires from six aspects of learning motivation, attitude, anxiety, empathy, inhibition and personality to investigate the influence of affective factors on SLA ability of learners in the four groups. This paper is composed of five chapters: Chapter 1 is the introduction; Chapter 2 introduces study objects and methods; Chapter 3 analyses the affective factors in the process of SLA; Chapter 4 explores the influence of affective factors on the learners’ SLA ability; Chapter 5 is conclusion.

STUDY OBJECTS AND METHODS

Study objects
The study objects were selected on the basis of the inclusion criteria and exclusion criterion below:
Inclusion criteria: (1) Chinese second language learners who are physically and mentally healthy, mainly including full-time junior high school learners, high school learners, university learners and postgraduates; (2) learners who had participated in at least 5 second language trainings (including language skills courses such as listening, speaking, reading, and writing, application skills courses such as interpretation and translation, and extension courses such as human history and cultural background), at least 1 test and 1 extracurricular activity of second language in the past 6 months; (3) learners who will be carry out the SLA learning within the next 6 months after participation in this study; (4) learners who agreed to be surveyed or followed up; (5) learners who were informed and agreed to participate in the study, and signed an informed consent.
Exclusion criteria: (1) learners who were unable or unwilling to recall and feedback their psychological and affective state in the process of SLA; (2) learners who were informed and agreed to participate in this study but posed a poor attitude to that.

Figure 1. Age (a) and SLA time of the 200 selected second-language learners in the 4 groups

In this study, 200 second-language learners were selected as the study objects and they were divided into four groups according to the random number table method: junior high school (JHS) group, high school (HS) group, college student (CS) group and postgraduate student (PS) group; each group had 50 students with 25 male and 25 female learners. The learners in JHS group were 12-15 years old with an average age of 13.25±1.12 years old; their SLA time was 4.0-10.5 years with an average time of 7.24±3.26 years; their second language all was English. The learners in HS group were 15-18 with an average age of 16.44±1.23; their SLA time was 7.5-13.5 years with an average time of 10.29±3.21 years; their second language all was English. The learners in CS group were 18-22 years old with an average age of 20.48±1.02; their SLA time was in 0.5-17.0 years with an average time of 5.79±9.52; their second
languages included Spanish (12 students),
German (11 students), English (9 students),
French (7 students), and other minority
languages (11 students). The learners in PS group
were 22-25 with an average age of 24.07±1.24;
their SLA time was 4.5-20.0 years with an
average time of 14.64±10.11 years; their second
languages include English (27 students), Spanish
Language (9 students), German (5 students),
French (4 students) and other minority languages
(5 students). Figure 1 shows the general
information of 200 selected learners among the
4 groups.

Questionnaire design
The designed questionnaire consisted of
three parts: personal information, objective
choice and subjective feedback. There were 10
questions in the personal information section,
including the gender of the subject, the age, the
major, and the SLA level. Besides, to facilitate
the respondents to quickly answer questions,
this part was arranged in the end of the
questionnaire, and used the choice question
type so that the respondent only needs to select
the appropriate option according to his actual
situation. The objective choice part was

designed from 6 aspects of learning motivation,
attitude, anxiety, empathy, inhibition and
personality to investigate the influence of
affective factors on the SLA ability of these
four groups; this part was scored on a 5-Point
Likert-Scale, 1 for "completely disagree", 2 for
disagree, 3 for neutral, 4 for agree, and 5 for
completely agree. In this part, each question is a
statement, followed by the options (1), (2), (3),
(4), and (5), for the respondents to choose the
one representing the degree of recognition. The
subjective feedback part was designed from the
aspects of motivation and attitude, empathy and
anxiety, self-esteem and self-confidence,
inhibition and risk, allowing the respondents to
describe the influence of affective factors on
their SLA ability.

Data Processing
Statistical analysis was performed using SPSS
19.0 statistical software. The measurement data
were expressed as mean ± standard deviation
(\(\bar{x} \pm s\)). The t-test and one-way analysis
of variance were used to analyse the observed
indicators. The statistical results P<0.05 was
regarded as the significant standard.
and it is only the cause of language acquisition; affective factors are the key conditions for language acquisition.

The relationship between the affective factors and the SLA

Motivation is one of the main affective factors influencing the SLA. It is an internal drive of affection or desire that encourages people to take certain special actions. The motivation of SLA refers to the desire and driving force of the learner to learn the second language, as a psychological state for the learners to initiate and maintain the action (Maftoon & Ziafar, 2013). It is generally divided into integrative motivation and instrumental motivation; the former refers to the motivation that learners have special interest in the target language community and expect to participate in or integrate into the social life of the society; to the latter means the desire of learners to learn a target language using the target language as a tool. In the mother tongue environment, the instrumental motivation is dominated among the second language learners. The learners with such motivations aim to cultivate communicative competence, use foreign languages to obtain the information needed, and realize the effective communication purpose (Maftoon & Ziafar, 2013). It is generally divided into integrative motivation and instrumental motivation; the former refers to the motivation that learners have special interest in the target language community and expect to participate in or integrate into the social life of the society; to the latter means the desire of learners to learn a target language using the target language as a tool. In the mother tongue environment, the instrumental motivation is dominated among the second language learners. The learners with such motivations aim to cultivate communicative competence, use foreign languages to obtain the information needed, and realize the effective communication purpose with foreign languages. Generally, if the learners have a friendly attitude and a strong interest in the language and the native speaker of this language, they will be willing to learn more about the language; on the contrary, if they have a negative attitude, they will psychologically resist affections and hinder language learning.

Language anxiety is an affective experience and anxious state that describes the tension, anxiety, worry, and self-doubt of learners when learning and applying a second language. It is a collection of unpleasant affective reactions and psychological discomforts caused by various multiple threats. Researchers have classified anxiety into three types: trait, state, and situation; trait anxiety is a more persistent anxiety tendency, or can be seen as an aspect of personality; state anxiety can be defined as fear, nervousness, discomfort, etc. and the arousal of the autonomic nervous system induced by different situations that are perceived as dangerous, as the product of trait and situational anxiety; situational anxiety is a state of apprehension, discomfort, and anxiety precipitated by the experience of new or changed situations or events, and it can be divided into two categories: promotion and obstruction; the former motivates learners to overcome difficulties in the learning process, constantly challenges new learning tasks, and strives to overcome anxiety; the latter leads learners to avoid learning tasks, so as to avoid the roots of anxiety. Although some researchers have found that a certain degree of anxiety contributes to learning, most studies have shown that the effects of anxiety are negative, and that language anxiety is inversely proportional to acquisition, that is, the less anxiety, the more learned; the more anxiety, the less learned (Islam, 2017). Figure 3 shows the relationship between correlation coefficient and filtering rate of motivation and anxiety for the learners in the 4 groups.

Figure 3. Relationship between correlation coefficient and filtering rate of motivation (a) and anxiety (b) for the learners in the 4 groups

Language attitude refers to a personal or collective disposition, feelings and behaviours towards a particular language or a language variety. Generally, attitude consists of three parts: cognition, affections, and intention. The cognition is the learner's belief in things; the affections refer to people's reaction to things; the intention is the tendency of individuals to treat things or take actions to deal with things. In the processes of second language acquisition, attitude is the learner's tendency to learn second language, and has an extremely important influence on the process of SLA and the final result. Studies have shown that if the second language learner has a negative or hostile attitude towards the second language, it will generate greater anxiety in foreign language acquisition, enhance affective filtering, and inevitably hinder second language acquisition; on the contrary, if the attitude is positive, it will
help second language acquisition and improve the efficiency of acquisition. The attitude of the learner directly affects the degree of investment in learning; the active learner has a high degree of input, a strong sense of participation, a small psychological pressure, and a relatively significant learning effect.

Inhibition is an act of avoidance and concession taken to protect oneself. When learning a second language, the learners need to carry out new explorations and various attempts, so it is inevitable to make mistakes, and to be criticized and ridiculed by others. The learners who are often criticized and ridiculed shall have an enhanced sense of self-protection, and a weakened self-confidence. When others' words and deeds involve them, they will often filter them even if there is no any ridicule. Therefore, in the process of SLA, they may try their best to avoid various attempts and refuse to participate in language activities, thus losing many valuable opportunities. In short, inhibition is a psychological barrier between yourself and others, which seriously affects learners' communication and becomes a stumbling block in the process of SLA. However, this kind of negative psychology can be overcome. Learners need to understand whether they have such psychological characteristics, analyse the root causes, and then make some bold attempts in a targeted manner (Kermani, Aliahmadi, Monfared et al., 2013). Also, they should prepare for the test, including practical and psychological preparations, and cope calmly and calmly treat praise and ridicule no matter whether it is success or failure. In this way, with the accumulation of successful experiences, self-confidence will increase, and the inhibition will naturally disappear.

Empathy is also one of the most important affective factors. It can help to get rid of some anxiety, improve self-confidence, form good communication with people, and generate interest in SLA, and especially enhance recognition of culture and the goal of achieve language learning. Also, the learners are no longer confined to existing modes of thinking through empathy, and they can evaluate themselves, the people and things around them in a comprehensive, objective, and fair way. Only by grasping their own affections can teachers embody the characteristics of empathy in their interactions with learners. In the process of foreign language learning, teachers should not only give learners an accurate way of empathy, but also be good at understanding the learner's spiritual world and choose the appropriate way for the learners to express. The empathy emphasizes that teachers should fully understand the learners' minds, consider and experience their affections, and evaluate their opinions, attitudes and behaviours in a fair and impartial manner, thus promoting learners and teachers in communication. As result, it can effectively convey empathy to learners, and form a real learning effect. Figure 4 shows the relationship between correlation coefficient and filtering rate of inhibition and empathy for the learners in the 4 groups.

Figure 4. Relationship between correlation coefficient and filtering rate of inhibition (a) and empathy (b) for the learners in the 4 groups

Extroverted and introverted personality is the important affective factor influencing second language acquisition. From the common sense of the average learners, extroversion and introversion are undoubtedly a set of opposing concepts, and it is difficult for learners to use these two words to make a simple definition of people's personality. The personality of learners is related to the effectiveness of foreign language learning. According to the educational psychology, one's personality can be divided into two types: extroverted and introverted personality, both influencing the foreign language learning. It is generally believed that extroverted personality is conducive to SLA, and introverted personality is not. In fact, learners of different personalities use different learning strategies when dealing with different learning tasks. For extroverted learners, they are more eloquent and responsive, and more likely to gain more input and practical opportunities (Hurtado & Estrada, 2010). However, they often ignore the
form of language, so it is possible that the acquired language knowledge is chaotic, and unsystematic. The introverted learners may be better at using their quiet character to conduct more in-depth formal analysis of limited input and using strategies such as reasoning etc. to analyse and solve problems.

**INFLUENCE OF AFFECTIVE FACTORS ON LEARNERS’ SECOND LANGUAGE ACQUISITION ABILITY**

Influence of affective factors on the cognition of deep cultural differences in second language acquisition

*Figure 5. Correlation coefficients between different affective factors and second language acquisition*

From the perspective of educational psychology and psycholinguistics, affections refer to the affective and sensuous aspects of human behaviour, and its changes involve personality factors and feelings of learners. The affective factors such as learning motivation, self-confidence, anxiety and attitude play an active role in stimulating, regulating, maintaining and directing learners’ cognitive activities, directly affecting the speed and effectiveness of foreign learning, and the learners’ overall learning development and long-term development. The correlation coefficients between different affective factors and second language acquisition are shown in Figure 5. When the affections are filtered, the brain filters the language input and reduces the language acquisition; when the affections filtering is reduced, the brain absorbs the intelligible language input and strengthens the language acquisition mechanism. Therefore, in the process of learning, in order to enhance the absorption of learners, teachers should try to reduce affective filtering as much as possible, create an environment with low level of affective impairment, and guide them into a relaxed and happy learning state. Suitable learning enables learners to engage in learning with positive affections and greatly develop the creative potential of learners and the flow of information in an affective atmosphere, and it constantly stimulates and maintains affective communication.

The self-confidence of learners is very important for foreign language learning. The cultivation of self-confidence requires the help of the learners themselves and the outside world. The foreign language teachers should respect the individualized development in the learning process, and give full play to the learner’s advantages according to the learner’s own situation, thereby enhancing their self-confidence. For those who are actively speaking in the classroom, teachers should provide them with more performance opportunities and enhance their sense of superiority; for those who lack self-confidence, teachers should pay attention to their advantages and encourage them to try to speak. For some of the mistakes made by learners, teachers should be tolerant and try to correct them. All these can not only ease the tension of learners speaking foreign languages, but also enhance their self-confidence. The teachers should skilfully use the advantages of each learner according to their individual development needs, give those appropriate opportunities to develop their own strengths and explore their potential, and continuously help learners build self-confidence (Izumi & Bigelow, 2000).

In addition, teachers should give encouraging evaluation to learners’ language learning. The correcting of language errors should be treated differently; learners with introverted personality and weak self-confidence should avoid being corrected in public. Teachers and learners must have a two-way communication in the classroom, e.g., the placement of desks and chairs should help this kind of communication; teachers and learners should be able to be equal, trustful, and fearless; if learners perform well, they should be encouraged in time; mistakes is
inevitable, allowing them to make self-improvement. In such favourable teacher-student relationship and a relaxed and harmonious environment, learners’ learning efficiency can be improved. Besides, the content of learning, that is, the input of language, should be from shallow to deep. If the learning material is too difficult and only considers the needs of a small number of learners, then it will make other learners feel at a loss, affecting their self-esteem and self-confidence. What’s more, the learners should adopt an attitude of acceptance and tolerance to the differences between learners; each learner is an independent individual who has different learning motivations, personality traits and learning styles. If the learners are all stereotyped, it will increase their anxiety and make them afraid of their learning goals. Therefore, learners should be allowed to develop according to their own characteristics and expertise.

Comparative analysis of the influence of affective factors on SLA ability of learners from different ages

The influence of the learner’s age on SLA involves two main aspects in terms of the affective factors: adults are not willing to give up the sense of nationality and identity brought by their accent, and to get a kind of new language and give up on self, because a new language often means a new world and corresponding ideas; adults have better cognitive ability than juveniles, but relying on cognitive ability in language learning is often less successful. Both juveniles and adults have more academic advantages in the processes of SLA. Juveniles have an advantage in the natural language acquisition environment, and they are more dependent on language acquisition mechanisms. In the classroom learning environment, the situation is more complicated due to different conditions in all aspects; in general, adults learn faster and better than children in a classroom learning environment, because they not only have strong deductive ability, but more importantly, they know how to adjust their various affections to better cooperate with teachers and achieve the best learning results. Whereas, the juveniles with poor affective control and self-discipline feel it quite difficult to concentrate their thoughts and attention for a longer period of time in the classroom learning. Previous studies have shown that the vast majority of learners want teachers to correct their linguistic mistakes euphemistically, and inappropriate corrective methods of teachers can also lead to anxiety among learners. It is undoubtedly an auxiliary means to influence and trigger the happy affections of learners with the positive affections of teachers. In the learning process, learners are often very sensitive to teacher feedback, especially negative feedback. If learners want to make classroom communication go smoothly, positive affective feedback is necessary in the process of error correction. This requires the teacher to have overall control at three levels: first, distinguish between the different treatments; secondly, the timing of error correction, preferably after the completion of communication, and then correct the error; finally, the corrective method, and the learner correction should be made in a euphemistic or indirect way (Geeslin & Guijarro-Fuentes, 2006). In this way, the learners can be induced to find errors themselves and correct them in a positive manner.

Enlightenment of affective factors analysis on second language acquisition

It is extremely important to cultivate learners’ cultural empathy ability and distinguish cultural empathy from misconception, cultural sympathy, and cultural sensation based on the cultural diversity. The cultural sympathy is to explain and evaluate other people’s behaviours based on their own values and their criteria. Their perceptual skills and communicative skills are still self-centred, and there is still a self-centrism in the subconscious. The cultural misconception is mainly manifested as excessively suppressing one’s own affections, reacting indifferently, and not sensitively detecting and capturing the affections of the communicative objects. Therefore, the true cultural empathy should reflect the existence of self, not separating from the local background of national culture in its cultural standpoint, and it can actively cast its own affections into the position of others, to experience the feelings of others and achieve the fusion and the resonance of feelings. Therefore, teachers should point out that cultural misconception, cultural sympathy and cultural sensation violate the principle of cultural empathy and help learners master the essential differences.

After stimulating the learner’s interest in learning, the learner’s learning potential should
be also exerted. The learner's existing knowledge and senses should be mobilized for independent learning. Teachers can design scenes that are familiar to learners, and encourage them to use the existing knowledge to communicate with teachers, and other learners, thereby developing their ability to learn independently. This process can be the way of paving new knowledge and learning. To reduce the difficulty of learning new knowledge, teachers can also put new knowledge directly in the context of learning, so that learners can more directly and actively carry out language learning activities. At present, more universities lack a foreign language environment and learners only have to speak foreign languages in the foreign language classroom. But in the classroom, the scenes created by the teacher can guide learners' oral practice, which is beneficial to mobilize their initiative and enthusiasm, and encourages learners to transit from the affective orientation of passive learning to active learning. Through self-exploration and learning in daily life, the learners will also use foreign languages to communicate naturally (Kung, 2019).

Figure 6 shows the comparisons of filtering rate of affective factors and information output accuracy between male and female students. The foreign language scholars have conducted various studies on the affective factors and achieved the theoretical research results, which is conducive to understanding the role and influence characteristics of affective factors in the process of SLA, and also clarifying the related development direction (Nittrouer, Caldwell-Tarr, Sansom et al., 2014). In addition, it's a direct impetus to SLA research, helping to better understand the nature of foreign language learning, i.e., learning a second language is to grasp the impact and role of the target language through meaning analysis, and then transform them into their own inner language. Since the majority of learners in the second language are adults who already have a native language, the influence of the mother tongue cannot be ignored. In learning, the various affective factors of the mother tongue learning should be guided to facilitate the second language learning. From the perspective of mastering vocabulary, it is not enough to simply emphasize the semantic contrast of the first language meaning and the English languages, but should focus on whether the learner's learning environment is placed in a kind of environment indirectly or directly influenced by affective factors such as light-heartedness, confidence, self-esteem, and strong motivation to learn. If so, learners are likely to succeed in acquisition.

**Figure 6. Comparison of filtering rate of affective factors and information output accuracy between male and female students**

![Figure 6](image_url)

**CONCLUSIONS**

This paper explores the influence of affective factors on learners' SLA ability. For this 200 second language learners were selected as study objects, and divided into four groups according to the random number table method: junior high school group, senior high school group, college group and postgraduate group. Also, a questionnaire was designed from six aspects of learning motivation, attitude, anxiety, empathy, inhibition and personality to investigate the influence of affective factors on SLA ability of learners in the four groups. The main conclusions are drawn as follows:

(1) There were significant differences in the influence of affective factors on the SLA ability between different age groups.

(2) The affective factors such as learning motivation, attitude, anxiety, empathy, inhibition and personality play an active role in stimulating, regulating, maintaining and directing learners' cognitive activities, directly affecting the speed and effectiveness of foreign
learning, and the learners’ overall development and long-term development of second language acquisition.

(3) Affective factors have an important influence on the second-language learners’ deep cultural differences, and the affective filter hypothesis has important practical significance for guiding learners’ SLA.

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REFERENCES


