

Factors that affect L2 learning and a brief discussion of aptitude

A discussion about factors that affect second language learning

Factors including age, intelligence, motivation, aptitude and learner preferences are considered to have affected second language learning most (Lightbown & Spada, 2000). Intelligence is often associated with academic performances at school, researches have indicated that intelligence has a positive correlation with learners' second language acquisition level. However, intelligence is a very tricky figure in predicting learners' language outcomes. It has few connections with oral speaking and plays an insignificant role in classes that focus on interactions rather than impartment. Aptitude is considered to be a talent in language learning. It could be displayed in individuals in various aspects. The ability of rapid memorization of new words, quick mastery of grammar rules, and the positioning of keywords in paragraphs are all certain aspects of aptitude (Lightbown & Spada, 2000). To achieve better learning outcomes, learners with similar aptitude can be grouped and instructed by teachers with corresponding methods. Personality is considered to have influences on learners' language performances rather than their acquisitions, in another word, communicative skills rather than literacy skills. While extroverted persons are suggested to have more advantages in language learning, it is still debatable whether they have better performances and language skills. What is certain is that being introverted will affect learners' pronunciation, especially in second language learning (Lightbown & Spada, 2000). Personality is an ambiguous figure that is hard to measure in scientific researches. To discover its relation with second language learning, many other factors must be linked. Motivation has been recognised by scholars to be a key factor that affects second language learning. There is a positive correlation between motivation and successful language learning, no matter motivation comes from learners' needs or enthusiasms, but who promote whom is still inconclusive (Lightbown & Spada, 2000). Unlike other factors, learners' motivations can be set and stimulated. Learners' internal motivations shift with changes in social powers as well as language positions. Teachers awaken learners' motivations by delivering encouragements, warming up classes with amusing games, enriching learning materials and setting reachable goals for group works. Learners' preferences and their beliefs especially influence experienced learners and adults. Despite learners being 'visual', 'aural', or 'kinesthetic', they all have their preferred method to study (Lightbown & Spada, 2000). This not only informs teachers that various teaching approaches could be adopted in class to satisfy learners' various preferences but also propose the concept that teachers ought to think critically on traditional textbooks and universal pedagogies. Learners' beliefs sometimes hinder their study progresses because they 'strongly prefer' their previous study methods and feel reluctant to accept new ones. It is a challenge for teachers to develop flexible approaches to match learners' previous study experiences. Age is easier to measure than other factors. Researches have proved that the most

noticeable influence that age has in second language learning is learners' pronunciation (Lightbown & Spada, 2000). Though learners of all ages could reach their language goals in the end, younger learners tend to speak more native-like, especially in immigrant families. The Critical Period Hypothesis suggests that human beings have a specific period around puberty that allow them to acquire language faster and better than anytime else. Learners who have passed this period display lower levels of learning abilities due to the impacts of their past experiences. The Critical Period Hypothesis also indicates that younger learners, especially children, have more opportunity to practice their language skills because they are exposed to a more tolerant and ease environment which allows them to make mistakes without judgements. Based on The Critical Period Hypothesis, in 1980, Mark Patkowski conducted a research that proved it was the adolescent that achieved the highest level of language acquisition in the end. Children who started language learning before puberty were more likely to be successful while children who started post-puberty were likely to achieve average performances in language skills. Jacqueline Johnson and Elissa Newport further supported The Critical Period Hypothesis by confirming that children who started language learning before age 15, particularly before age 10, had more chances to be native-like in all language skills rather than pronunciation only. The Critical Period Hypothesis has been questioned for years because many researchers share the idea that age is closely linked to other factors like language exposures and input qualities. From previous studies, it was biased to conclude that age was the variable that affected second language learning.

What is aptitude ?

Aptitude always refers to a certain kind of natural-born ability to learn something, like a talent, either physically or mentally, internally possessed by individuals. The definition of aptitude various with time. Carroll defines aptitude as a trait, stable and would not be affected by other factors even language teaching (Carroll, 1965). Skehan challenged Carroll's view, suggesting his definition of aptitude was for the construction of MLAT test. Singleton believes that aptitude is an accumulation of language experience and reflection (Singleton, 2014). In language study, it is suggested as a capability to achieve language acquisition in a limited time (Li, 2015). Instead of being an index of determining whether an individual's language performance is successful or not, aptitude means to predict how far and how soon an individual's language acquisition can get and illustrate why certain individuals could learn a language faster than their peers. In another word, aptitude can be used as a figure to predict rather than determine success in language learning (Lightbown & Spada, 2011). \

Scientific Methods to evaluate aptitude.

There are four mainstream language aptitude tests currently being used for research. In 1959, John B Carroll and Stanley M Sapon introduced the Modern Language Aptitude Test (MLAT) which is seen as a prime stone for researches of aptitude in language learning. Candidates'

phonemic coding ability, grammatical sensibility, inductive language learning ability, rote and associative memory are being checked to make predictions on their discipline's final results, as well as their SAT scores (Carroll, 1965). In 1967, they designed a follow-up version, MLAT-E, especially for young children. Referenced on MLAT, Paul Meara introduced a new computer-based aptitude test named LLAMA. Four aspects including vocabulary learning, phonetic memory, sound-symbol correspondence and grammatical construct the whole test, aiming to measure learners' implicit learning ability (Saito, 2017). Another name in the history of language aptitude test that shall not be forgotten is Paul Pimsleur, who developed the Pimsleur Modern Language Aptitude Battery (PLAB) in 1966. Apart from examining vocabulary, language analysis, sound discrimination and sound-symbol association, this test takes students' grade points and their interests in languages into account. PLAB is specially designed for students from grade 7 to 14 and is popular among parents for its result can diagnose language learning disability (Rogers et al., 2016). Defense Language Aptitude Battery (DLAB) is used by the military to evaluates soldiers' raw abilities of language concept. The test has 126 multiple choice questions in audio and visual segments and is mainly conducted for recruits in order to distribute them in different positions in the future (Powers, 2018). These recognized tests have bred many theories and conclusions on the relations between aptitude and language learning.

Aptitude plays an indispensable role in language learning

Ample researches are concluding that aptitude plays a key role in language learning. Based on research outcomes of the MLAT test, Carroll indicated that aptitude had an impact that could not be ignored in L2 learning. Each aptitude in the MLAT test benefits different aspects and stages in L2 learning (Skehan, 2016). Phonetic coding helps learners distinguish and process unacquainted sounds in a limited time, this aptitude is of great importance to help learners manage input information at the beginning of language learning and can also measure the accuracy levels of learners' pronunciation (Carroll, 1965). Grammatical sensibility and inductive language learning ability are suggested to function in the middle stage of language learning, for these aptitudes are associated with learners' abilities in vocabulary and grammar acquisition, key factors in determining how soon and how well a language learner can apply inputs onto obtained language structures or reconstruct to make sense (Yilmaz, 2013). In the later stage of language learning, rote and associative memory is believed to boost comprehensive outputs and language applications by merging achieved knowledge automatically and spontaneously (Linck et al., 2013), in another word, this aptitude determines the fluency and speed of learners' language expression, as well as their operation of grammar and syntax (Satio, 2017). In a study of 3,106 L2 learners over 5 decades, it was concluded that aptitude played a bigger role for high school students than university students, and correlated more with explicit treatments (Li, 2015). Compared with older learners, younger learners rely more on aptitude in predictive studies or on the early learning stage

(Li,2015). Learners who are proficient in the first language tend to show aptitude in L2 learning and are more likely to success (Cochran et al., 2010). Verbal intelligence is thought to have associated with language aptitude. Since previous studies have proved that women have more strengths in verbal intelligence than men (Vilagran,2010), they are more likely to achieve L2 success. For teachers, specially-designed group works can be allocated to students with similar aptitudes in order to obtain better outcomes.

Aptitude matters less in language learning than suggested.

Researchers have not denied aptitude's effect on language learning, they simply share the idea that aptitude is not as important as previous studies suggested. There were examples of candidates who scored high in DLAB but failed in language programmes. Even standard aptitude test like MLAT or PLAB has been validated, it is still a challenging job to measure aptitude precisely because these tests are only testing 'decontextualized language' (Hinton, 2014). In the 1980s', Krashen's theories enlightened the following researches that didn't favour aptitude as a key factor in language learning. Krashen firstly indicated that aptitude had nothing to do with language acquisition, it only functioned under a conscious learning context. His idea later developed into an argument that learners' ability of processing input information in communication and their increasing spontaneous engagements in language acquisition don't associate with aptitude at all. Skehan supported this argument by suggesting that aptitude matters more in informal and daily conversations (Skehan, 1998). In 1991, Cook mentioned that language learning outcomes were associated with teaching methods adopted in class as well as the learning context, seeing aptitude as the only element that could predict L2 results was limited. Aptitude's importance has been exaggerated since it only influences learning outcomes in the initial stage of language learning and explicit conditions. This conclusion is still debatable because with different approaches to measure the L2 outcomes, the significance of figures which are associated with aptitude are changing (Li, 2015). Besides, it is hard to separate language aptitude and language learning experience as they coexist in the learners' L2 study process (Singleton, 2014). It is considerably biased to emphasize too much on aptitude in L2 learning. If so, textbooks and researches on other factors and other pedagogies would make no sense. The MLAT test has proved that four aspects of aptitude are associated with L2 learning. However, none of them has been found to correlate with the appropriateness of language learners' word choices (Satio, 2017). This is because appropriate use of words is associated with language exposure and their communicative methods (Satio, 2017). Working memory, not a component in MLAT, has been suggested to be the vital element in aptitude (Wen & Skehan, 2011). Therefore, there is no wonder that future researches on language aptitude should focus both on the validity of aptitude tests and the rethinking of the construction of these tests and their extents (Singleton, 2017).

Unlike other factors that affect L2 learning, aptitude is hard to measure and its correlation with other factors keeps shifting. There is an argument over L1 proficiency is the foundation of L2 learning, and aptitude is their functional L1 learning experiences being applied to L2 learning (Vilagran,2010). Recent studies are focusing on the relationship between aptitude and bilingualism, as well as intelligence and sex. In the researches of the past decades, aptitude has been transformed from a stable and unique trait to a complex and dynamic figure which has been considered to have interactions with other factors like motivation and learner preferences (Wen, 2012). The role of aptitude in L2 learning will be clearer with more researches carrying on.

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