

Comparison of Negative Emotions and Positive Emotions Correlations with the Study Ability of Language of Students

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Abstract: Past studies have shown a very general statement of the relationship between emotions and language learning. However, the differences relationships between positive emotions and negative emotions with learning ability remains unclear. This review paper is going to classify positive emotions and negative emotions respectively, and their relationship with each other and language learning ability is discussed in depth. At the same time, differences and similarities between them are compared respectively and presented to the public in a clear form. At the same time, it analyzes the reason why language learning ability is related to emotion. The study shows that there is a positive relationship between positive emotions and language learning ability and negative emotions tend to negatively relate to the learning ability in normal situations. However, it will also hurt language learning to some extent in the extreme state of positive emotion. On the contrary, negative emotions maintained at an appropriate level will also be positively related to learning ability. Based on the result the study found, if students learn to control their emotions, they will greatly improve their efficiency in language learning.

Keywords: positive emotion, negative emotion, language learning

1. Introduction

After decades of years of research, there are studies to show that emotions would have a profound impact on people's cognitive processes in the brain which is also related to studies such as decision-making or other various cognitive processes. The strong relationship is associated with the brain's cognitive process and the ability of learning language while there are different parts in the brain to express different messages and store information, so it is reasonable to hypothesize that there is a connection between emotions and language learning [1]. Moreover, studies have shown that different emotions or personal beliefs have a relationship with the ability to study the language of students. While different emotions here are defined as bodily dispositions for situated action and will lead to different ways to react to different immediate environments, how people act in the situation under positive emotions (e.g., happiness, joy, & hope) would be different from how they act under the negative emotions (e.g., stress, anxiety, & depression), which might relate to the physiology that it is modulated to the environment in different dispositions [2]. Since people would have different reactions to the same situation under different emotions, according to Aragão, it is supposed to state the hypothesis that positive and negative emotions have a different relationship with the ability to study languages.

Positive emotions, such as happiness, joy, and hope, are generally defined as a situation that makes people feel pleasure or feel like get the advantage of a reward and have great importance in the effects on cognition, physiology, and behavior [3]. Recent studies have already found that the cerebro-cerebellar system contributes to cognitive and language functions, and at the same time, anatomical evidence and behavioral evidence shows that the brain system of human being also has affection for not only language skills but also emotions [4]. The relationship between emotions and the ability to learn and use language is nonnegligible. Moreover, positive attitudes in motivation processes have been improved to play an important role in how learners' reactions toward the language group play in facilitating learning, it also affects language learners in social context by shaping attitudes toward the learning situation, interact with other people, and the language itself [5].

Negative emotions (e.g., depression, stress, and sadness) usually be seen as bad aspects and bring negative effects which mean just pain, not pleasure. However, negative emotions play an important role in studying language as well as positive emotions do. Stress, for example, will release stress hormones in the cerebral cortex and help people to focus attention, and improves their memory of relevant information during the learning process [6]. Nevertheless, being in a negative emotion state for the long term may cause a problem or even hurt mental health. Autism, for example, is defined as a mental illness that affects much of patients' normal lives including their abilities to communicate with others which relate to verbal skills and language ability [7]. The mixture of strong negative emotions (e.g., enigma, depression, or sadness) is the important factor to cause such mental illness and puts people in a negative emotional state for a long time. Since positive and negative emotions are going to have a different relationship with the ability of language learning, people who experienced negative mental states may have different modes of learning or thinking than those who stay in a positive emotion state.

Although there are much of studies that try to improve the strong link between emotions and language learning, there is a blank space for people who are in a negative emotions state for a long time (e.g., people with depression) and what the relationship between it with language learning is. Moreover, the compression of language learning ability between people who are in a positive mood for a certain time and those who bring in a negative emotional state has not been studied yet. Since different individuals are going to have different thinking systems and the cortex secretes different chemicals in response to positive and negative emotions to affect cognitive works in the brain, which are going to make differences in their ability in language learning, it is necessary to compare the differences between people in positive emotions and negative emotions while learning the language so that offer the correct advice to get the improvement of the efficiency in the area of learning languages. Therefore, this study is going to investigate the impact of positive emotions and negative emotions on language learning and their relationship with each other and compare and integrate their similarities and differences from the perspective of details. To compare the relationships between different emotions with the ability and result in language studying, the article decides to 1) divide emotions into two main parts one by one analysis of positive and negative, and 2) compare what differences in the results they each produced, 3) explore the emotion exactly about how students learn language ability and achievements. Finally, analyze and conclude the relationship of two different emotions between the similarities and differences in language learning.

2. Comparison of Negative Emotions and Positive Emotions Correlations with the Study Ability of Language of Students

As researchers including psychologists and neuroscientists start to pay attention to the relationship between cognitive psychology and the ability of learning, there are more and more pieces of evidence that support that emotion correlates with learning languages, and both these factors are associated with the area of the cognitive area in the brain [2]. The term "emotion" is defined as "broadly aspects

of emotion, feeling, mood or attitude which can condition behavior and influence language learning”, which includes not only simple emotions like feeling upset or energy but also something broader which may be the factor (e.g., feeling, mood, attitude, value, judgment, personality factor, learner variables) affects the ability to make an important decision, which means, affect personal belief [2]. For the reason that emotions may greatly influence the scope of what students want to learn and discover, which means emotions probably are the important factors to be the catalyst to make students do decisions in their brain consciously or unconsciously, different emotions are highly likely to result in different results in students learning area.

In language learning, it is not just language itself (e.g., Grammar, spelling, use of modifiers) that may have a relationship with emotions, but also the expression of this kind of language including tone (intimacy or alienation), pronunciation (clear or vague), intonation (high or low) may depend on which emotion states the student in. Language is an important tool to help people to be able to communicate with each other in society, which not only links different kinds of people together with different individuals but also it plays an important role to express their emotions to achieve rational and correct communication functions [8]. Since the ultimate goal of learning languages is to communicate and connect to the whole society, communication (e.g., conversation, meeting) with others also is a crucial way for to students acquire information about the language, which means it is an indispensable method in language learning. As mentioned below, the meaning of communication by using languages also has a goal which is to communicate each other's emotions, therefore it is reasonable to infer there is an interactive relationship between emotions and language learning.

To further explore the relationship between emotion and language learning, it is important to analyze how different emotions relate to different results in studying language systematically, including people's different ways of communication and the change in pronunciation and intonation, and the different detail shown during the study process (e.g., listening, speaking, reading and writing) in different emotional states.

3. Positive Emotion and Language Learning

Depending on the evidence mentioned below, there is enough support that proves there is a strong relationship between positive emotion with language learning. To explore the relationship between these two factors in more detail, the paper is going to analyze the correlation between joy and hope which two positive emotions and language learning were analyzed sequentially.

3.1. The Relationship between Joy and Language Learning

Joy is defined as an important positive emotion and also an important research subject in the field of positive psychology, which is usually treated as a non-specific positive affect. At the same time, based on studies of joy today, joy usually is thought of as the emotion that occurs in the human body when a goal is achieved or a "good thing"(e.g., Getting the ideal grades in the examination, successful promotion happened) which means it is usually associated with positive effect [9]. So, it is possible to have a positive relationship between language learning and the situation under joy, which means students who are in a joyful mood are going to learn more efficiently than those who are in a normal emotional state. Moreover, joy is proven to have a positive correlation with self-regulated learning. In the other words, spontaneous language learning can reinforce the positive effect of joy on learning ability, including performance in class and daily communication [10]. According to the studies which explore the relationship between positive emotion and the second language study in Japan and China, the result shows that learners' joy is positively related to studying, practicing, and using the target language. The researchers suggest that students' joy to study language also positively predicted both their long-term and short-term language achievement by analyzing the result of studies [11]. By

taking this evidence, it is enough to show that there is a positive effect between joy and language learning.

3.2. The Relationship between Hope and Language Learning

Hope is another important positive emotion that has similarities to joy in its correlation with language learning. In the other words, it is supported to positively related to the ability to learn language including learners' performance in class or target language in daily use [12]. When a student is hopeful about the language he or she is learning and expects positive results (e.g., getting a high GPA on tests, getting teacher's praise), for example, this kind of positive emotion is going to be positively related to students' language learning ability. Furthermore, hope is an inside motivation that urges students to achieve language learning. According to the resources and literature, positive emotion is associated with self-identification or self-esteem which is directly proportional to the level of language learning ability. Moreover, according to Tinto's Theory of Student Development (1975), a study suggests that students with high academic hopes are more likely to excel in their field of study and achieve their goals [2, 13]. All in all, it is reasonable to infer that as a positive emotion, hope has a positive relationship with language learning ability.

4. Negative Emotion and Language Learning

Depending on the studies mentioned below, as an important factor that not only relates to the efficacy of learning a language but also to students' mental health, negative emotion is a research object that cannot be ignored. To understand the relationship between negative emotions and language learning in depth and detail, this study will use two extreme examples of long-term negative emotions in depression to discuss the relationship.

4.1. The Learning Language Ability of the Depression Population

Depending on the studies researching the relationship between the negative emotions (e.g., anxiety, depression, stress), it has been proved that there is a strong relationship between depressive symptomology and a student's academic performance. The level of depression is a powerful tool that can be used to predict the dropout probability and grades, which can also be seen in the region of language learning performance. In a study that points to undergraduate students, the researchers found a negative relationship between chronic depression and a student's ability to learn. The result shows that depression has a positive relationship with the drop-off rates of primary school graduation (3.8%), college entry (4.4%), and college graduation (2.6%) [14-15]. Thus, it can be seen that depression has a negative relationship with learning ability across all student groups.

In another mental disorder survey among college students, the result shows that depression may have a serious impact on students' social psychology which means not only the ability to acquire knowledge will be affected, but also the ability to communicate or connect with others will have a negative impact [16]. Since all the factors are related to language learning, it is reasonable enough to support that there is a negative relationship between the ability to learn a language and depression.

At the same time, depression also has an impact on the way language is expressed. The study on the effect of baseline depression on language use shows that depression and negative effects would significantly positively predict the use of self-focused language, which means the population with depression will tend to use more "I" sentences during their daily communication. Compared with mentally healthy people, depressed people are more likely to use words like "I think" and "I feel" when expressing themselves verbally, and use this self-focused language much more often than they use second or third-person words. Based on the results of the study, there is a positive relationship between the frequency of self-focused word use and depression level. However, the study also

declares that the increase in third-person pronoun use occurs when people experienced a temporary negative emotion, regardless of whether they are depressed or not, which means there should be something different that impacts the language used between the temporary and long-term negative emotion [17].

5. Compassion between the Relationships with the Language Learning Ability of Positive Emotion and Negative Emotion

Since positive emotion and negative emotion have been proven to have a strong relationship with the ability to learn a language, there are some differences and similarities in their impacts of them on language learning.

First of all, learners tend to use person differently in the language under different emotions. Language learners usually use more self-focused words under negative emotions than when they are under positive emotions. At the same time, negative emotion can be seen as an effective tool to predict the frequency of third-person words used by a language learner. According to the research which focuses on the features of language use among depressed college students, the study also points out that people who are in negative emotions tend to get self-centered, which can be explained by using self-focused theories psychologically. Therefore, by comparing with positive emotions, negative emotions may lead people and put them in the region of self-focused and affect them to use more first-person words and third-person words than normal [16-17].

Then, although the enrolment rate and academic efficacy have a negative relationship with negative emotions and positively relates to positive emotions, studies show that they both have positive impacts on language learning. Moreover, sometimes negative emotions have a greater positive impact on language learning than positive emotions. The result of the study in 2018, shows that there is a general facilitative effect of negative emotions on morphosyntactic learning. However, positive emotion can only strengthen the ability of morphosyntactic learning, it has not been found to have any positive or negative impact on the accuracy or learning efficacy [1]. This disruptive finding is likely to affect people's stereotyping of negative emotions, which is thought always links the bad grades and terrible learning efficacy between negative emotions.

Finally, in some situations, positive and negative emotions both have negative impacts on language learning. Since it is necessary to remember some new words and sentence formats during language learning, it is inevitable to divert some memory storage space to store this new information. Based on the capacity limitation theory mentioned in the study, the nature of positive and negative emotions is a resource-consuming job of mobilizing information networks in the brain, which would conflict with the energy learners need to mobilize during language learning [1]. When learners are learning more complex language expressions (e.g., compound clauses), both positive and negative emotions may become a burden for learners.

6. Conclusions

According to the study, emotion plays an important role in relating to people's ability to interpret the stimulation of information from the environment. Different emotions are also negatively or positively related to decision-making, which is associated with learning ability. Also, human emotions play important roles in human society to help people communicate with each other and the purpose of it is the same as using language in daily life, which means they probably correlate with each other. When a person is in positive emotion, for example, the degree of the colloquial language of words used may be changed because of accompanying this emotion.

Based on the related studies of language learning and emotions, it is reasonable to predict that there is a strong relationship between language learning ability and emotions. Both positive and

negative emotions have a strong relationship with language learning ability. At the same time, both of these two different kinds of emotions have a negative and positive relationship with language study ability in different situations. Moreover, emotions can bring affects language expression, including the choice of words and the clarity of pronunciation.

Joy and hope are two representative positive emotions and both of them show the positive relationship between language learning ability. Not only has a positive relation to the learning ability in language study, but also to the personal state of learning new information. The related study shows that joy has a positive relationship with self-regulate learning, which means people who are experiencing joy are more likely to engage spontaneously in the task of learning a new language. People are going to show positive performances not only in language class but also in daily communications with joy. Hope is another positive emotion that also has a positive relationship with the performance of students in language class. Based on studies about hope, a student is more likely to complete his or her studies and graduate successfully in hope. The study shows that students who consistently have high hopes for themselves and their lives are more likely to do better in their language courses.

As an extreme example of negative emotion, depression has a strong negative relationship with language learning ability. Overly depression is going to cause serious problem in physical and mental health, which may affect the ability and efficiency of learning new knowledge greatly and declines the desire to communicate and build a connection with others. Contrary to the effects brought by positive emotions, extreme negative emotion like depression enhances people's feelings of self-denial and makes them refuse to accept new knowledge and it weakens their ability to analyze new information. Also, the result of the study shows that depression also is a factor to affect the way language is expressed. People with depression tend to use self-focused words more than second-person or third-person words, and use more verbal language without modifiers or adjective words. The study also shows that third-person pronouns are used more often in depressed populations.

Through a deep study and the reviewing of related literature resources on these two kinds of emotions, the differences between them have become obvious. Firstly, people are more likely to use self-focused words in negative emotions than those who in positive emotions. Then, sometimes negative emotions have a positive relationship with language learning ability and the positive effect it brings is as much as the positive emotions. Stress, for example, gives people study motivation and even enhances it. At the same time, negative emotions are found to benefit morphosyntactic learning while positive emotions do not have any positive or negative impact on the accuracy or learning efficacy. Finally, extreme positive emotions may also hurt language learning ability because of the use of much cognitive load.

There are some limits to the study of the comparison of the relationships with positive and negative emotions. First of all, since the study is mostly based on literature research, there are some limits on the practicality, so these conclusions still need more experimental data to verify their accuracy and authenticity. Then, the examples chosen for positive and negative emotions to research in this study do not represent all positive or negative emotions, so there may be some exceptions that are not completely ruled out.

It is necessary to further explore the relationship between emotions and language learning. Depending on the relationship between these two factors, people will be able to predict the performance of language learning based on their emotions. Because of this reason, people may be able to regulate their emotions to make language learning more efficient.

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