

Analysis on Emotional Issues Based on Cognitive Psychology

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Abstract: Cognitive psychology is concerned with the information processing mechanism of human mental health, focusing on the relationships among variables based on holism, which plays an important role in exploring human cognitive processes and emotional changes, thus facilitating behavioral cognition and understanding of mental phenomena and emotional internal processes. This paper first introduces emotional problems related to cognitive psychology, secondly elaborates on the concept and characteristics of emotional problems, and finally explores relevant influencing factors and solutions to emotional problems. On this basis, it presents the specific manifestations and causes of emotional issues from the cognitive psychology perspective, hoping to provide related references for future research.

1. Introduction

In recent years, as the economy develops and the competition intensifies, the incidence of such social-emotional disorders as anxiety, pressure, and depression has gradually increased. If these negative emotions are not washed out or eliminated in a timely manner, they will hurt physical and mental health. On this background, it is necessary to guide people to establish a scientific and reasonable psychological cognition, cultivate a good mentality, and keep optimism. Considering that cognitive psychology has studied emotional issues and behavior patterns affecting mental health from an information processing perspective, understanding its ideas, theories, and methods and drawing on relevant research findings can help deeply understand the mechanisms of emotions and behavior, and bring enlightenment and support for mental health services and mental health education^[1]

2. Basic concepts of emotional issues in cognitive psychology

2.1 Cognitive psychology

Emerged in the West in the mid-1950s as a psychology trend and research area, cognitive psychology focuses on how people form laws for mental activities with cognitive structures by processing objective things based on their existing knowledge and its related theories and applications. It includes the basic principles of cognition, memory, and thinking and a complete system based on interconnections among these principles as its core and involves some special areas of human advanced intelligence activities such as language, art, music, dance, drama, painting, inventions, and

creations (As shown in figure 1).

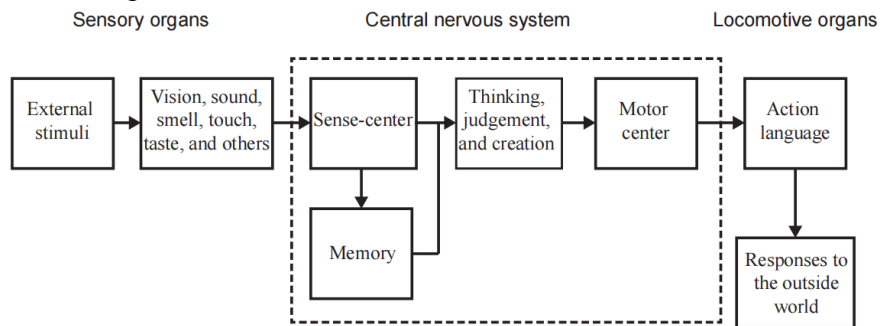


Figure 1: Cognitive psychology framework^[2]

Cognitive psychology suggests that emotions are formed by a combination of factors rather than a single one. Therefore, it is necessary to examine the factors affecting emotional changes from multiple perspectives to understand the causes of emotions, known as the cognitive-emotional model. This model sees emotions as responses to external stimuli, either natural environment and artificial situations, or information from others and self-experience. When occurring in the outside world, certain events cause physiological arousal that changes the excitability of neurons in the corresponding areas of the cerebral cortex and ultimately leads to emotions. This series of processes is known as the cognitive-emotional process.

2.2 Emotional issues

Cognitive psychologists think emotions have three characteristics: transient, relatively stable, and changeable. To tackle emotional issues well, one should first understand what emotions are and how to recognize and deal with them properly. Emotions are closely related to many aspects of people's daily lives, such as work, learning, and interpersonal relationships. Although there are many definitions of emotions in the field of psychology, there is no uniform standard that covers all emotional phenomena. The term Emotion in this paper refers to an emotional experience or change caused by reasons that affects our normal social functions.^[3]

Emotional issues refer to bad feelings and negative emotions due to various reasons. For example, you may feel sad when something goes wrong, or you may feel envious when seeing others succeed. If persisting, these emotions are detrimental to our development and cause problems for others around us.

3. Theoretical foundations provided by cognitive psychology for research on emotional issues

Cognitive psychology suggest that the human mind is not limited to the workings of the brain but can be presented as body movements. Therefore, emotions are also controlled by body movements. For example, when you hear a piece of music, you have a corresponding picture in your head while becoming happy. It shows that emotions don't happen in a vacuum but come from our perception of the external world and are subject to the external environment. Therefore, only by clearing the root causes of emotions can we better understand them and take effective measures to regulate them.

From a cognitive perspective, emotional issues are essentially a series of subjective evaluations (including sensations, perceptions, and memories) of objective things and the associated physiological responses, wherein the most important link is the mental representation formed by the individual processing stimulus information, the so-called Frame Effect.^[4]

3.1 Information encoding and emotional issues

In cognitive psychology, emotional issues are the results derived by an individual through interpreting an event in a particular situation. In other words, the perspective that an individual interprets the event determines his or her ultimate emotions. Generally speaking, different people will interpret the same event from different perspectives, thus coming to different conclusions. So, what kind of interpretation can bring positive emotions? This is a question worth considering.

3.2 Emotional attribution theory and its application

The famous American psychologist Hyde proposed Hyde's Three Dimension model includes external control, stability, and controllability. He argued that people tend to attribute bad results to unstable factors and good to stable factors. Specifically, external control reflects whether an individual is willing to take responsibility while stability reflects personality traits. In addition, he emphasized the role of controllability that decides whether an individual believes he or she can change the current situation. In real life, everyone has more or less autism, always thinking that others are doing better, which inevitably affects physical and mental health in the long run (As shown in figure 2).

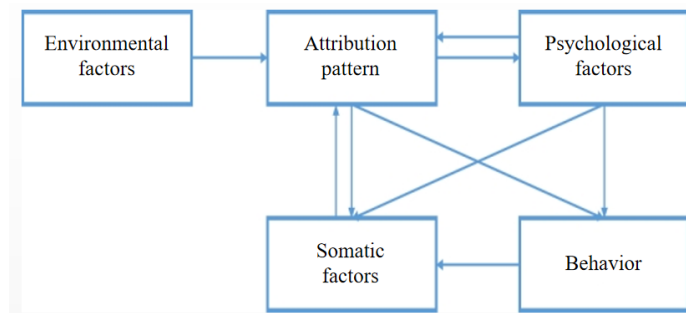


Figure 2: Attribution theory model^[5]

3.3 Emotional valance-arousal trade-off theory and its application

Arnold Wolfe, an American psychologist, formulated the classic principle that people prioritize attention to negative emotional stimuli. Basically, people pay more attention to negative emotional stimuli and less to positive emotional stimuli, which means that people give more prominence to negative stimuli. The reason is that the negatives are more likely to stimulate people's instinctive impulses bringing strong approach motivation and are more difficult to eliminate.

4. Analysis on emotional issues based on cognitive psychology

Some are easily influenced by external things and are hard to control their emotions in everyday life. This phenomenon is known as Cognitive Bias. There are subjective reasons for cognitive bias in addition to objective reasons. For example, such factors as personality traits and upbringing can cause cognitive bias. Another is that a person comes to cognitive bias caused by failure to deal with the current situation due to insufficient knowledge and ability.

4.1 Individuals with higher levels of loneliness are more likely to become depressed

A study found loneliness is closely related to depression, which means that individuals with higher levels of loneliness are more likely to become depressed. Meanwhile, relevant studies showed that

people tend to adopt negative ways to cope with the outside world, such as relieving their depression by smoking, drinking, or other undesirable ways when feeling more lonely. In addition, scholars suggest that the reason that individuals with higher levels of loneliness experience more negative emotions may be related to their cognitive deficits. For example, they are unable to deal effectively with the things they encounter, which in turn impairs their emotional regulation. As it were, loneliness as a negative emotional experience is not just a simple emotional response, but a complex mental disorder.

4.2 Loneliness has a significant negative correlation with optimism

Findings found that loneliness has a significant negative correlation with optimism, which means that individuals with higher levels of loneliness had less self-confidence and were more pessimistic. Meanwhile, however, the findings did not show a direct relationship between loneliness and optimism. It shows that loneliness and optimism are intrinsically connected despite no causal association. Specifically, individuals with lower levels of loneliness are less likely to develop negative emotions such as low self-esteem and depression because they can quickly adapt to their surroundings by playing their better interpersonal skills. Conversely, individuals with higher levels of loneliness often feel helpless and hopeless, and may even accompany negative emotions such as self-blame and guilt. Clearly, loneliness is one of the causes of depression and optimism.

The analysis of color and cognitive psychology has been a popular area of research in recent years. Experts agree that the ability to see color has a purpose, meaning the brain wants to know the color of things around you for a reason. For example, when a banana turns from green to yellow, people know it's ready to eat. To the human brain, a green banana means "no," while a yellow banana means "yes. Similarly, other colors in nature may also convey important survival cues. A cold, dreary day may not be as active as a warm, sunny day. Red (as in the color of burning surfaces and blood) may be the color of alarm or danger. From this perspective, it makes sense that each color people see would elicit a physiological response from the body. According to a 2020 neuroimaging study, each color produces different brain activity. Different areas of the brain are stimulated based on the color a person sees, which releases hormones and sends signals to other parts of the body - when it comes to depressive colors like gray and blue, these colors are often labeled as "cool" tones and are thought to have a calming effect on the brain. (As shown in figure 3).^[6]



Figure 3: Color extraction for depression

4.3 Attribution analysis of lonely and depressed groups

Attribution theory suggests that when an individual faces a novel stimulus, he or she will try to find the cause through his or her efforts, and this motivation to seek the cause is called internal control. If an individual cannot find the cause or a reasonable reason, he or she will give up exploring and choose to avoid it instead. One group in everyday life tends to blame others for their problems and habitually complains about external factors but rarely reflects on their shortcomings. The group of people is the typical external controller, also known as pessimists. Furthermore, some have two other extremes: think they can do anything with overconfidence or don't dare to try any challenges with an extreme of inferiority, optimistic and pessimistic respectively. Each type easily leads to tension and even breakdown in relationships.

5. Exploring how to solve negative emotional issues based on cognitive psychology

5.1 Methods for correcting negative cognitive bias by cognitive psychology

In psychological counseling, it is important to help consultants understand that their negative emotions can bring specific harm but can be changed through learning, thus better helping them control and regulate their emotions. To do that, the specific approach is to establish a link between cognition and emotion from cognitive psychology and then take appropriate measures to address the problem based on the actual situation. The three steps are as follows: first, it is clear that many reasons can cause an emotional issue, such as the environment or the individual; second, it is important to find a suitable starting point or identify emotional patterns, thus solving it entirely; third, it is critical to train students to form the correct cognitive concept with the ultimate goal of learning self-regulation no matter which way to solve emotional issues.^[7]

5.2 Methods for improving cognitive bias by cognitive psychology

Correcting cognitive bias involves not only teaching consultants how to adjust and keep their mentality but also guiding them to understand what thoughts are healthy and reasonable. Therefore, on the one hand, teachers can use the knowledge of memory in cognitive psychology to help students improve their mindset, thus eliminating their negative emotions. Positive thoughts and emotions can help to increase an individual's sense of well-being, while wrong can put him or her in pain. On the other hand, cognitive biases can also be improved through collective efforts, such as a variety of cultural activities on campus, regular cinema screenings, and speech competitions. This way can broaden their horizons and improve their emotions. Moreover, encouraging individuals to participate actively in activities can help to enhance their mental resilience and gain more social support.

6. Conclusion

Above all, some research results about emotion have been gained in current academia. However, these studies have some shortcomings, which need to be improved and developed. Firstly, it's critical to clarify the concept of emotion and its generation mechanism; then, it's better to explain the causes and processes of emotion through embodied cognition based on cognition; finally, the combination of cognition and emotion from the perspective of psychology should be applied to solve various emotional issues encountered by people in real life. This paper is hoped to bring reference value for future research.

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