THE INFLUENCE OF EMOTIONAL STATES ON MEMORY AND INFORMATION PROCESSING

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Annotation. This paper provides a theoretical analysis of the influence of emotional states on memory and information processing. It examines the mechanisms through which emotions affect memory encoding, attentional allocation, and the efficiency of information processing. The analysis suggests that the level of emotional arousal, emotional valence (positive or negative), and individual emotion regulation strategies are among the key factors determining the quality of cognitive functioning.

Keywords: emotional states, memory, information processing, attention, cognitive processes, anxiety, emotion regulation.

Introduction

In contemporary psychology, emotion and cognition are viewed as interrelated systems. In educational settings, professional activities, and everyday life, individuals frequently receive and encode information while experiencing various emotional states, such as stress, anxiety, and joy. Therefore, investigating the influence of emotions on memory and information processing is of considerable theoretical and practical importance. The aim of this study is to provide a theoretical

analysis of the patterns and mechanisms through which emotional states influence memory and information processing.

Main Body

Emotional states exert varying effects on human memory processes. Emotionally significant events are often remembered more effectively because emotions direct attention toward salient information and influence memory consolidation. However, intense negative emotions, anxiety, and stress may, in certain circumstances, interfere with the acquisition of new information and its subsequent retrieval when needed.

Emotional arousal has a complex relationship with memory. According to the Yerkes–Dodson law, moderate levels of arousal may enhance cognitive performance, whereas very low or excessively high levels may impair it. Neurophysiological research indicates that interactions between the amygdala and the hippocampus contribute to the consolidation of emotionally significant experiences in long-term memory. The emotional content of information also influences memory processes. According to the mood-dependent memory phenomenon, individuals tend to recall information more effectively when their current emotional state corresponds to the emotional context in which the information was originally encoded. For example, a depressed mood may facilitate the retrieval of negative information, whereas a cheerful emotional state may make positive memories more accessible.

Emotions also influence the way information is processed, with attention serving as a key intermediary mechanism. Anxiety narrows attention toward threatening stimuli, reduces the availability of cognitive control resources, and may consequently impair task performance. In contrast, positive emotions can broaden the scope of attention and promote flexible and creative thinking.

Several brain structures, particularly the amygdala, hippocampus, and prefrontal cortex, play important roles in the relationship between emotion and memory. The amygdala is involved in processing emotionally salient information, the hippocampus contributes to the formation of new memories, and the prefrontal cortex participates in the regulation of attention, working memory, and higher-order cognitive processes. The coordinated functioning of these structures influences the retention of emotional experiences and the efficiency of information processing. It is important to emphasize that the effects of emotions on memory and information processing are not uniform. These effects depend on the intensity and duration of the emotional state, the characteristics of the situation, and the individual's psychological characteristics. Therefore, the study of emotional states should take into account both their beneficial and potentially detrimental effects on cognitive functioning.

Conclusion

Emotional states influence memory and information processing in different ways, depending on the level of arousal, the type of emotion, and the strategies used to regulate it. Moderate emotional arousal and positive emotional states may support cognitive functioning, whereas intense anxiety and stress may impair it. The conclusions of this theoretical analysis may be applied to the organization of educational processes, psychological counselling, and the development of stress management programmes.

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