



EMOTION LEARNING AND MEMORY IN SCHIZOPHRENIA

Strong, M.N. , Allen, D.N.

Department of Psychology, University of Nevada, Las Vegas



Introduction

- Prior research indicates that processing of emotional information is particularly problematic for individuals with schizophrenia.
- An important component of emotional processing is the accurate encoding and recall of emotionally valenced information.
- The current study addresses this matter by investigating performance on a task assessing learning, recall, and recognition in patients with schizophrenia.
- In this manner, recall of emotionally valenced information may be investigated

Results

- Mixed model Analysis of Variance (ANOVA) was used to examine differences between SZ and CN in learning and memory for emotional (EVLT) and non-emotional words (CVLT).
- For the CVLT here was a significant within-subjects effect for learning, showing better performance with repetition of the word list.
- There was a significant effect for group, indicating that the SZ group performed worse overall compared to the CN group.
- There was also a significant interaction effect which reflects faster learning over trials for non-emotional information in controls versus persons with schizophrenia.
- For EVLT performance, there were also significant main effects for learning, group, and interaction effect.
- These results suggest better learning with repetition of emotional and non-emotional information for controls relative to people with schizophrenia.

Method

- Participants included 122 individuals controls $n = 52$; SZ $n = 70$ (mean age = 42.4).
- Participants were chosen because they met the Diagnostic and Statistical manual for Mental Disorders, 4th edition, text revision (DSM-V-TR) criteria for schizophrenia (SZ) and healthy controls (CN).
- The Emotional Verbal Learning Test (EVLT) and The California Verbal Learning Test (CVLT-II) were administered to participants as part of a larger battery of tests.

Discussion

- Research indicates that emotion processing is impaired in individuals with schizophrenia.
- An important component of emotional processing is the accurate encoding and recall of emotionally valenced information, which was the focus of the current study.
- For the CVLT there were significant effects for group and trail, indicating that the SZ group has lower learning across trials compared to the control group, and that both groups improved from trial 1 to trial 5 in the number of words recalled.
- For the EVLT, in addition to main effects for group and trail, there was also a significant interaction effect. This interaction effect indicates that individuals with schizophrenia fail to learn emotional words as the learning trials progress, while the control group will continue to learn emotional words across all learning trails.
- These findings indicate that SZ patients have impaired learning and memory abilities which is consistent with earlier findings of general memory impairments which are well-known features in SZ.

