COGNITIVE EMPOWERMENT OF AUTISTIC CHILDREN FROM THE PERSPECTIVE OF COGNITIVE LINGUISTICS

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Background: Cognitive linguistics, which advocates humanism, is at the forefront of language research. Cognitive linguistics provides us with the most accurate, systematic and perfect language model. The teaching view of cognitive linguistics emphasizes the role of context and language use, attaches importance to the communicative function of language, advocates the design of communicative tasks with increasing difficulty in teaching, and provides learners with a large number of opportunities for input and output. In the process of completing communicative tasks, learners acquire both formal and cultural information. Autism cognitive impairment is one of the three clinical symptoms of autism and the main goal of education and rehabilitation of autistic children. Autism is a serious psychological problem, which is mainly manifested in the psychological problems of low cognitive ability and lack of interest in social communication.

Cognitive impairment in autism has been paid more and more attention by parents, schools and all walks of life. At present, most of the academic circles analyze and study from the perspective of language learning and picture understanding of autistic children, and pay attention to combining the perceptual characteristics of autistic children, such as visual semantic understanding training combined with the visual processing advantages of autistic children. Train their cognitive ability through auxiliary communication system. On the basis of the above methods, this paper studies the cognitive ability enhancement strategies of autistic children from the perspective of cognitive linguistics. According to the latest research conclusions of neuroscience and psychology on the cognitive characteristics of autistic children, combined with the deep cognitive characteristics of autistic children, such as attention to detail processing, specific memory processing, good bottom-up processing, scientific organization of training content and reasonable arrangement of training plan. Based on the research on the basic cognitive ability of autism perception, this paper discusses the methods of improving cognitive ability of autistic children.

Study design: In order to improve the cognitive ability of autistic children ,30 male and 10 female children aged 3-5 years were selected to set up experimental group and control group. The language and scene recognition ability of these autistic children was tested by analysis. According to the grade, the retest reliability of the test was 0.47-0.73, the split-half reliability was 0.68-0.77, the homogeneity reliability was 0.44-0.63, $P<0.01$.

Methods of statistical analysis: Setting scenes include the mother's cooking in the family, the teacher's singing in the school, and the vehicles passing through the street after school. The cognitive ability of the scene was tested by analyzing the training ability of the scene was tested image memory and language memory of different scenes in these children, the cognitive ability of autistic children was improved. The basic information of the subjects in this study is shown in Table 1.

Table1. Actual Situation of the Subject.

	Experimental group		Control group	
Age/year	Male	Female	Male	Female
3	4	2	4	2
4	5	2	6	2
5	6	1	5	1

SPSS19.0 were used to analyze the indexes and scores of the two groups, and the experimental results were analyzed by pre-test and post-test of autistic children.

Results: After three months of training and learning in the above scenes, the cognitive results of autistic children are analyzed as shown in Table 2. After three months of training, the cognitive ability of autistic children in the experimental group was improved effectively, including the cognition of family scene, school scene and social traffic scene. Compared with the control group, the cognitive ability of autistic children did not improve substantially due to the lack of three months of training. In order to further verify the rationality of this study, the analysis of whether it reached a significant level of testing, autistic children's cognitive ability, picture cognitive ability, memory ability to study. Among them, picture comprehension and perception $P<0.001$, there were significant differences. Analysis of the data in Figure 1 shows that there are obvious differences in language comprehension, perceptual reasoning, training and memory ability and their

own processing speed under the visual threshold of linguistics. Among them, speech comprehension and perceptual reasoning (P=0.000<0.001), with significant differences; speech comprehension and working memory (P=0.001<0.01) have significant differences, which further verify the rationality of this study.

Table2. Test results before and after cognitive test for autistic children.

| Aggregate score	Average score		n		Standard eviation		Standard error of mean	
	Experimental group	Matched group	Experimental group	Matched group	Experimental group	Matched group	Experimental group	Matched group
Total post-test	29.5	20.5	5	5	6.2	12.3	2.1	3.5
Family scene recognition	15.1	2.1	5	5	6.5	14.0	1.6	4.2
Post-family testing	64.2	15.2	5	5	3.4	12.5	2.4	6.5
School scene recognition	54.3	23.3	5	5	5.2	10.5	2.8	7.8
Post-school testing	70.2	60.2	5	5	3.6	8.3	3.6	5.6
Social scene recognition	12.0	11.3	5	5	4.1	9.1	0.4	5.9
Social post-test	35.2	25.4	5	5	4.5	5.7	2.4	5.1
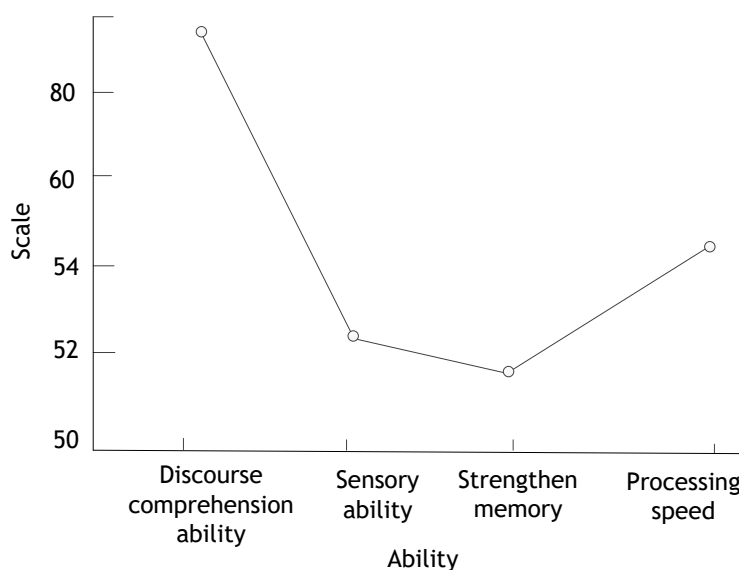
Figure 1. Distribution of cognitive indices in children with autism.

Conclusions: Autism is the most common subtype of generalized developmental disorder. Autism involves language, cognition, social communication ability and other basic psychological developmental disorders, which is a serious neuropsychiatric disorder. Therefore, whether in different language scenarios or at different language levels, combined with the reality of life, according to the characteristics of autistic children's attention to detail processing, specific physical memory, strengthen the autistic children more abundant, more specific language stimulation, so as to effectively improve the cognitive ability of autistic children. The lack of speech comprehension ability of autistic children indicates the lack of intelligence in autistic children. Therefore, autistic children are mastering the intellectual enhancement gained through sociocultural experience.

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INFLUENCE OF OIL PAINTING ART ON THE PSYCHOTHERAPY OF PATIENTS WITH DEPRESSION

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Background: Depression is a psychology-originated, comprehensive mental and physical disease. At present, the treatment of depression is mostly carried out in the form of speech psychotherapy plus drug therapy, but there are problems such as low treatment efficiency and insignificant effect. Under such circumstances, "art therapy" has been used as a means of psychotherapy in the United States, Japan and other countries and has achieved remarkable results. However, the most primitive painting art therapy did not use oil painting tools as a method of psychotherapy. Oil painting art is a kind of rehabilitation training method that has good compliance and can effectively improve patients' depressive symptoms. Color psychology research shows that certain colors can play a different degree of psychological adjustment to patients with mental illness. However, there are no relevant reports about the intervention of oil painting psychology in the process of painting training for depressed patients. To this end, research the influence of oil painting art on the psychotherapy of patients with depression.

Objective: This article discusses the influence of oil painting art as a treatment method on the psychological state of patients with depression, and analyzes the treatment effect with depression as an example, in order to create more suitable treatment methods for the increasing number of depression patients.

Subjects and methods: From October 2018 to April 2019, psychotherapy was given to 30 depressive patients who met the ICD-10 diagnostic criteria for depressive episodes in the outpatient or inpatient department of a hospital. All patients with Hamilton Depression Scale (HAMD) scores ≥17 points, support their choice of medication, require no other psychotherapy, and are willing to accept the author's psychotherapy, and sign an informed consent. Among them, 15 were males and 15 were females, ranging in age from 18 to 65, with an average of (30.5±11.5) years old. The lowest education level was junior high school, the highest was a doctorate degree, 5 were in college or graduate school, and 4 were suspended due to illness. There were 7 participating workers, 9 unmarried, 5 married, and 2 divorced. There were 13 outpatients and 17 inpatients. The shortest course of disease is 3 months, the longest is 5 years, and the average is (32.3±27.6) months. Among the patients with depression, 8 cases were combined with dysthymia.

Study design: Divide the subjects into an experimental group and a control group. The training program of the experimental group is to provide oil painting training on the basis of maintenance medication and routine mental care. The training is carried out in the recreation room. A qualified nurse will guide the patient to train, distribute painting materials, and the patient can fill in and draw freely. The color number gradually increases. There are 5 training sessions per week, each training 30~60 min, continuous training 5 week. The training program of the control group: only maintenance of medication and routine care of mental illness, no oil painting intervention training.

Methods of statistical analysis: Hamilton Depression Scale (HAMD) was used to evaluate the depression state of patients before treatment. HAMD and CGI-GI were used to evaluate the clinical efficacy before the end of treatment. The clinical efficacy was evaluated according to CGI grade 4 (markedly effective, effective, slightly effective, ineffective). The "deterioration" of CGI-GI clinical symptoms was used as the recurrence index. The overall health and social function, treatment status and recurrence were followed up.

Use SPSS13.0 software for data processing and statistical analysis. According to the nature of the data, t-tests were performed for independent samples and paired samples.

Results: After the treatment of 30 patients with depression, the effective rate of treatment for all patients was 66.7%. After tracking the recovery of the subjects for 1 year, the recurrence rate was 21.4% within one year, and they were all patients in the control group. The general health and social function status of the experimental group subjects were good. Except for one case with Parkinson's disease, the rest were good, and they were competent for work or study. The control group and the experimental group were subjected to independent sample t-tests in the course of disease, number of treatments, treatment span time, HAMD before treatment, HAMD after treatment, and CGI-GI. The results are shown in Table 1.

The results showed that the HAMD score of depression patients was significantly reduced after treatment, indicating that oil painting treatment can significantly reduce the HAMD depression score. Intervention of oil painting art therapy in the treatment of depression can help adjust or improve the emotional state of depressed patients. The results of the study show that rehabilitation intervention training for patients with depression through oil painting art therapy can improve the cognitive function of patients.