

were significantly lower than those in the control group.

**Table 1.** BDI scores of two groups of patients with depression before and after teaching intervention

Time	Control group	Research group
Before intervention	21.52±2.03	22.67±2.41
After intervention	19.87±1.97	9.84±2.15

**Conclusions:** Art education in colleges and universities is a teaching activity with strong emotional factors. From the perspective of educational psychology, it can improve the effect of art teaching in colleges and universities on alleviating patients with depression. Art teaching under educational psychology can effectively reduce the BDI score of patients, alleviate their depressive symptoms and improve their mental health level.

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## RESEARCH ON STRATEGIES TO IMPROVE CHILDREN'S AUTISM IN EARLY CHILDHOOD BASIC EDUCATION

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**Background:** Childhood autism is a subtype of generalized developmental disorder, which is more common in men. It began in infancy. It is mainly manifested in different degrees of speech development disorder, interpersonal relationship disorder, narrow interest and rigid behavior. About 3/4 of the patients were accompanied by obvious mental retardation. In the context of general mental retardation, some children have better abilities in some aspects. The prevalence of the disease is 3-4/10000. However, it is reported that there has been an increasing trend in recent years. According to the National Institute for Mental Health (NIMH), the prevalence of autism in the United States is 1%-2%. Childhood autism is not clear, which may be related to the following factors: (1) Heredity: the role of genetic factors on autism has become clear, but the specific genetic model is not clear. (2) Perinatal factors: perinatal complications, such as delivery injury and intrauterine asphyxia, were higher than those in the normal control group. (3) Abnormal immune system: it was found that the number of T lymphocytes decreased, the number of helper T cells and B cells decreased, the lack of inhibitory T-cells, the activity of natural killer cells decreased, etc. (4) Neuroendocrine and neurotransmitter: it is related to a variety of neuroendocrine and neurotransmitter dysfunction. The study found that the immature development of monoamine systems in patients with autism, such as serotonin (5-HT) and catecholamine, as well as the abnormality of pineal hypothalamic pituitary adrenal axis, led to the increase of 5-HT and endorphins and the decrease of adrenocorticotrophic hormone (ACTH). Clinical manifestations: (1) Language disorder: language and communication disorder are an important symptom of autism and the main reason for most children to see a doctor. Children have expressive language before the age of 2-3. With the growth of age, expressive language gradually decreases or even completely loses, and remains silent for life, or uses limited language in very few cases. (2) Social disorder: patients are unable to establish normal interpersonal relationships with others. Lack of expression or posture expecting parents and others to embrace and caress, no happy expression when enjoying caress, and even refuse parents and others to embrace and caress. (3) Narrow interest range and rigid behavior pattern: patients are not interested in the games and toys loved by normal children, but like to play some non-toy items, such as bottle caps, or observe the rotating electric fan, which can last for dozens of minutes or even hours without getting tired. They are not interested in the main functions of toys, but pay great attention to non-main functions: Patients stubbornly require that the daily activity procedures remain unchanged, such as sleeping time and quilt cover, and take the same route when going out. If these activities are stopped or behavior patterns are changed, patients will show obvious unhappiness and anxiety, and even resist. Patients may have repetitive stereotyped actions, such as repeatedly clapping their hands, rotating in circles, licking the wall with their tongue, stamping their feet, etc. (4) Mental retardation: the intelligence level of autistic children is very inconsistent. A few patients are in the normal range, and most patients show varying degrees of intellectual impairment. Children with normal intelligence are called highly functional autism.

With the further development of early childhood education, our government, society, schools and families pay more and more attention to early childhood education, as well as children's personalized and

all-round development. Cultivating children's autonomous learning ability has become an important curriculum of children's basic education. The early childhood basic education model guided by the cultivation of children's autonomous ability provides a guarantee for the innovative development of early childhood basic education, and achieve the purpose of good implementation of early childhood basic education. According to the current situation of the cultivation of children's autonomous learning ability in children's basic education, this paper analyzes the value of the cultivation of children's autonomous learning ability in children's basic education, and puts forward the ways and practical paths of cultivating children's autonomous learning ability in children's basic education, so as to promote the good cultivation of children's autonomous learning ability. At the same time, aiming at the problem of children's autism, this paper carries out the research on the strategies to improve children's autism in early childhood basic education, in order to ensure that children with autism can grow up healthily and happily.

**Objective:** In order to improve the psychological problems of children with autism, this paper constructs a basic education strategy for children based on psychological analysis, which aims to ensure that children with autism can grow up healthily and happily.

**Subjects and methods:** 200 autistic children were selected as the research objects, and measured in combination with Autism Behavior Checklist (ABC), including interpersonal relationship, imitation behavior, emotional response, weird behavior, resistance to the environment, anxiety response, oral communication, intellectual function, etc. then the basic education intervention for children based on psychoanalysis was carried out, and the intervention period was 1 month. The improvement of psychological problems of children with autism before and after intervention was compared.

**Methods:** All data were statistically processed by SPSS22.0 software.

**Results:** Table 1 shows the improvement of psychological problems of children with autism before and after the intervention. It can be seen from Table 1 that compared with before the intervention, the autistic psychology of children has been significantly improved after the basic education intervention based on psychological analysis ( $P < 0.05$ ).

**Table 1.** Improvement of psychological problems of children with autism before and after intervention ( $n=200$ )

Dimension	Before intervention	After intervention	<i>P</i>
Interpersonal relationship	4.12±0.77	1.78±0.69	<0.05
Imitation Behavior	4.38±0.77	2.15±0.67	<0.05
Emotional response	4.51±0.84	1.03±0.61	<0.05
Bizarre behavior	4.72±0.71	2.06±0.79	<0.05
Resist the environment	3.38±0.77	1.34±0.76	<0.05
Anxiety response	4.51±0.84	2.65±0.81	<0.05
Oral communication	3.72±0.71	2.78±0.66	<0.05
Intellectual function	4.01±0.62	1.00±0.59	<0.05

**Conclusions:** The basic education strategy of children based on psychoanalysis can effectively improve the autistic psychology of children, and then provide a new perspective and strategy for the treatment of autistic children.

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## CORRELATION BETWEEN VISUAL COMMUNICATION DESIGN PRODUCTS BASED ON AUDIENCE PSYCHOLOGY AND CONSUMERS' PURCHASE INTENTION

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**Background:** Visual communication refers to the transmission of visual information to the audience, so that the audience can meet their own visual needs after receiving this visual information. Therefore, from a certain point of view, the process of visual communication design can also be regarded as the creative process of artistic works. Visual communication design works also have certain artistic attributes, which can reflect society, express culture and emotion. Through visual communication design, designers can realize