

## Coupling development of high-speed rail network and innovative cooperation based on travel behavior of depressed passengers

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**Background.** Depression is a common mental illness. Patients with depression show somatization symptoms such as loss of appetite, insomnia and low mood. The etiology and pathogenesis of depression are still unclear, and the pathogenesis is related to biochemical, neuroendocrine, sleep and brain electrophysiological abnormalities. This study takes depressed passengers as the research object to explore the intervention and influence of innovative high-speed rail services on patients with depressive episodes when they travel, so as to provide ideas for the coupling development of high-speed rail network and innovative cooperation.

**Subjects and Methods.** 38 cases of high-speed rail passengers with depression were randomly divided into the experimental group and the control group. The experimental group was treated with innovative psychological services of high-speed rail. Hamilton Depression Scale (HAMD) was used to evaluate the degree of depression before and after treatment, and Hamilton Anxiety Scale (HAMA) was used to evaluate the degree of anxiety.

**Results.** The scores of HAMD and HAMA in the experimental group after innovative psychological intervention services were lower than those before participation ( $P < 0.05$ ), and the difference was statistically significant.

**Conclusions.** The innovative high-speed rail depression psychological intervention service has a positive impact on depressed passengers. After the intervention, depressed passengers' depressed mood and pessimistic thoughts are improved, they no longer resist others, and their discomfort symptoms are significantly reduced. At the same time, this intervention mode opens new ideas for the coupling development of high-speed rail network and innovative cooperation

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## Effect of green ecological tourism industry on tourists' anxiety

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**Background.** With the improvement of people's living standards, more and more people are paying attention to their mental health,

and many people choose to travel to alleviate the impact of anxiety.

**Subjects and Methods.** This study selected 20 patients with different levels of anxiety, including mild anxiety, moderate anxiety, and severe anxiety, and divided them equally into an experimental group and a control group. The experimental group was treated with a combination of long and short acting drugs and green ecotourism, while the control group was only treated with a combination of long and short acting drugs. After six months of treatment, follow-up visits will be conducted to investigate the patient's anxiety relief.

**Results.** The survey showed that a total of 9 patients with severe anxiety in the experimental group had symptoms relieved, with 4 patients transitioning from severe anxiety to moderate anxiety, and 5 patients transitioning from severe anxiety to mild anxiety. Among them, 4 experienced mild anxiety, while the rest were cured. 6 patients with mild anxiety were cured. In the control group, 6 patients with severe anxiety had symptoms relieved, all of whom turned to moderate anxiety. Among patients with moderate anxiety, 4 experienced relief in symptoms, with 3 transitioning from moderate anxiety to mild anxiety and 1 being cured. Four patients with mild anxiety have been cured.

**Conclusions.** The experimental results indicate that the combination of green ecological tourism industry construction and drug use in the context of rural revitalization has a good therapeutic effect on alleviating anxiety symptoms in anxiety patients

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## Tourism stimulus on anxiety and depression in college students

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**Background.** The prevalence of anxiety and depression continues to increase, becoming the most common mental health symptoms, with a higher proportion of these two mental illnesses among college students.

**Subjects and Methods.** The survey randomly selects 50 college students who suffer from both anxiety and depression at a certain university and divides them into two groups. One group consists of 25 people, and each group is treated with psychotherapy combined with tourism stimulus and psychotherapy. The treatment course lasts for one year, and a follow-up visit will be conducted one year later to score anxiety and depression.

**Results.** The scoring results showed that among college students receiving combination therapy, the highest anxiety score was 8.6, which decreased to 3.7 after treatment. The highest depression score was 9.2, which decreased to 4.4 after combination therapy. Analysis of 25 people who received combined treatment found that the average score for depression and anxiety decreased to 4.1, and 5 of them were cured. Among college students who only received psychological treatment, the highest anxiety score was 9.1, which decreased to 5.3 after treatment. The highest

depression score was 8.7, which decreased to 4.9 after psychological treatment. The average score for depression and anxiety reduction was 2.9.

**Conclusions.** The experimental results indicate that tourism stimulus combined with psychotherapy has a better therapeutic effect on college students with anxiety and depression than using psychotherapy alone.

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## Teaching strategies for translation of British and American literature on alleviating cognitive impairment of recognition function

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**Background.** With the aging of the population, the incidence rate of cognitive dysfunction is also increasing. Cognitive impairment refers to one or more impairments in cognitive function that affect an individual's daily or social abilities.

**Subjects and Methods.** This study randomly selected 20 patients with cognitive impairment in the hospital and divided them into two groups. The first group was treated with medication supplemented by English and American literature translation teaching. The second group only used medication for treatment. After completing two courses of treatment, the patient's condition and their recovery are evaluated.

**Results.** The evaluation results showed that among the patients treated with combination therapy, 3 patients with more severe conditions showed significant improvement, 3 patients with moderate conditions showed significant improvement in their condition, 2 patients showed significant improvement, 1 patient showed a slight improvement, and 3 patients with milder conditions were cured. Among patients who only received medication treatment, 2 of the severe patients showed significant improvement, while the remaining 2 showed no significant change. Among the 4 patients with moderate conditions, 1 had a significant improvement, 3 had a minor improvement, and 1 of the 3 patients with mild conditions was cured.

**Conclusions.** The experimental results indicate that the combination of medication and English literature translation teaching therapy has better therapeutic effects on patients with cognitive impairment of recognition function than the use of medication alone.

## The intervention effect of marketing interactive teaching model on student depression

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**Background.** With the increase of academic pressure, depression has gradually become one of the most important diseases in students, affecting students' learning, life and physical health. As an innovative educational method, interactive teaching model of marketing has the potential to stimulate students' interest and enhance their enthusiasm for learning, and can become an auxiliary means to relieve students' depressive symptoms.

**Subjects and Methods.** 300 college students were selected as the research subjects, and were divided into the control group and the experimental group according to 150 people in each group. The control group was treated with traditional drug therapy, and the experimental group was treated with marketing interactive teaching model, emphasizing students' interaction and practice. Hamilton Depression Scale (HAMD) and self-rating Depression Scale (SDS) were used to evaluate the depression status of students.

**Results.** The results showed that the Hamilton Depression Scale score of the experimental group was significantly lower than that of the control group ( $P < 0.05$ ), and the difference was statistically significant. The self-rating depression scale score of the experimental group decreased by 9.1 points on average, and that of the control group decreased by 4.6 points. Statistical analysis showed that the improvement of depressive symptoms in the experimental group was significantly higher than that in the control group ( $P < 0.001$ ).

**Conclusions.** The results showed that the interactive teaching model of marketing had a positive effect on the treatment of depression, and could significantly reduce the symptoms of depression and anxiety of students.

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## Music therapy on depression in college students

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**Background.** The incidence of depression among college students is increasing year by year, which has a serious impact on