

## 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