schizophrenia management, but the treatment of many patients is not effective. Virtual reality (VR), a technology that simulates real environments, has begun to gain traction in the treatment of mental illness in recent years. The purpose of this study is to enhance the clinical therapeutic effect of patients in the recovery period through virtual reality technology combined with drug use.

**Subjects and Methods.** The study adopted a randomized controlled trial design and selected a group of patients with schizophrenia in a certain hospital as subjects. The experimental group received virtual reality combined with drug treatment, while the control group received only traditional drug therapy. After the experiment, the patients were evaluated for psychological symptoms, quality of life, and cognitive function. The results were statistically analyzed by SPSS23.0.

**Results.** The results showed that the experimental group had significant advantages in improving psychological symptoms and life quality and restoring cognitive function. Compared to the traditional treatment group, patients in the experimental group were able to better control the production of hallucinations and delusions in the virtual reality environment and showed better adaptability in daily life.

**Conclusions.** In the recovery period of schizophrenia patients, virtual reality combined with drug therapy has shown remarkable clinical effects, providing an innovative auxiliary treatment for schizophrenia treatment<sub> $\circ$ </sub>

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## New sports rules combined with sertraline on Posttraumatic Stress of volleyball players

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**Background.** In competitive sports, trauma and stress reactions are common problems faced by athletes. In order to explore methods to alleviate post-traumatic stress, research focuses on the effectiveness of combining new sports rules with medication treatment.

**Subjects and Methods.** The study selected 66 volleyball athletes with post-traumatic stress as the research subjects and divided them into an experimental group and a control group. The athletes in the research group received training on new sports rules and personalized sertraline therapy. The control group of athletes continued to receive traditional sports rules training and received placebo treatment at the same dose and time. During the research process, a standardized post-traumatic stress scale was

used to evaluate the two groups. Collected data were processed and analyzed by the statistical method SPSS22.0.

**Results.** After a period of experimentation, the volleyball players in the research group showed a decrease in their PTSD scores from the initial score of 80 to 55 after being treated with the new sports rules combined with sertraline. The players in the control group, after receiving traditional sports rules and placebo treatment, experienced a decrease in their PTSD scores from an initial score of 90 to 75.

**Conclusions.** The research results indicate that the combination of new sports rules and personalized drug therapy has a significant positive impact on post-traumatic stress athletes. New rules and drug therapy can effectively alleviate athletes' post-traumatic stress response.

# Computational fluid science curriculum reform on students with obsessive-compulsive disorder

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Background. Computational fluid science, as an interdisciplinary field, plays an increasingly important role in modern engineering and scientific fields. With the rapid development of technology and the gradual reform of education, the teaching methods and content of computational fluid science courses should also be updated to meet the needs of different student groups. Students with obsessive-compulsive disorder (OCD) may face specific psychological and cognitive challenges during their learning process, which may affect their understanding and mastery of the knowledge in computational fluid science. The research aims to explore the specific impact of computational fluid science curriculum reform on OCD students and provide targeted suggestions for educators to better meet the learning needs of these students. Subjects and Methods. The study randomly divided 106 college students with OCD into an experimental group and a control group with same number in each. The control group received routine teaching; The experimental group was taught on the basis of a curriculum reform of computational fluid science. The study used the Yale Brown Obsessive Compulsive Scale (Y-BOCS) to assess the degree of changes in students' obsessive-compulsive disorder.

**Results.** In the measurement before the experiment, the degree of students' OCD symptoms was relatively severe, but the difference between the two groups was not significant (P>0.05). After the experiment, the degree of obsessive-compulsive disorder in the experimental group was significantly improved and significantly lower than that in the control group (P<0.05).

**Conclusions.** The curriculum reform of computational fluid science can effectively alleviate students' OCD symptoms and improve their learning outcomes.

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# The role of volleyball combined with mental health education on college students' Dissociative Identity Disorder

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**Background.** Dissociative Identity Disorder (DID) is a serious psychological disorder that can have a serious impact on patients' daily life and social relationships. Based on this, the study applies the combination of volleyball and mental health education to the study of DID in college students.

**Subjects and Methods.** The study chose 80 college students from a university as the research subjects and randomly divided them into an experimental group and a control group, 40 in each. The experimental group received volleyball sports combined with mental health education, while the control group received conventional education. Speech oddity, indifference, and abnormal behavior were used as evaluation indexes, and relevant data were collected, and data analysis was processed by SPSS23.0.

**Results.** The average scores of the experimental group and the control group in terms of speech eccentricity were 2.5 and 3.8; the average scores of apathetic behavior were 1.2 and 2.5 respectively; and the average scores of perverse behaviors lifting were 1.5 and 2.8. The results of the t-test showed that there was a significant difference between the two groups in terms of evaluation indexes (P<0.01).

**Conclusions.** Volleyball combined with mental health education helps to improve the mental health of college students and reduce the risk of DID. It helps to promote the mental quality education of college students.

## Contrimetric: Article Citation Contribution Indicator for paper impact evaluation

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**Background.** The Journal Impact Factor (JIF), generated by Eugene Garfield in 1964, is a well-known and widely accepted

indicator for evaluating journal influence when scholar submit their papers to different periodicals. Different paper has its own citation performance after published online. Thus, the JIF is always changing in each year when times updates. This paper introduces a newly designed bibliometric indicator, Article Citation Contribution Indicator (ACCI), named as Contrimetric (from Contribution Metric). The indicator meets the criteria as it has special characteristics, such as easy to understand, open, innovating, and applicable to different publications. Based on the Journal Impact Factor (JIF), the ACCI is a new indicator that measures the impact of individual papers within a specific journal. Treating a journal as an independent scientific community, each paper can be viewed as a community member, with ACCI>0 indicating that the paper's academic impact has a greater impact than the community average, while ACCI<0 indicates that the paper's academic findings, innovations, spreading and impact are below the community average. The ACCI ranges theoretically in [-1, infinity], with ACCI=-1 for papers with zero citations after publication.

**Subjects and Methods.** For purpose of exploring the positive (or negative) effects of an author's single article on the improvement of journal impact factor, we proposed the ACCI. It is defined as a specific value to calculate the contribution of a single paper to its discipline or journal, its equation is shown as below:

$$ACCI = \frac{c_y - JIF_y}{JIF_y} \tag{1}$$

 $C_y$  refers to the number of citations of an article in present JCR year; and JIF indicates the Journal Impact Factor in present JCR year. Then the differences between  $C_y$  and JIF taking up of the total JIF in present JCR year is the value of ACCI.

**Results.** It can be calculated that the value of ACCI is -1 when the paper has 0 citation. The value range of ACCI is theoretically in  $[-1,+\infty)$ . When ACCI $\in$ [-1,0), it indicates that the article has a lower value than the average citation level or has brought negative effect on JIF; and when ACCI $\in$ (0,+ $\infty$ ), it indicates that the article citations is higher than average level and has brought a positive contribution in terms of citations. Furthermore, its innovation, new discoveries contribute higher level than other papers. Hereafter, we might treat each journal as a specific scientific community in its field.

Let's have an example to compute any article. We retrieved the article as below: Abdelmageed, S. and T. Zayed, A study of literature in modular integrated construction - Critical review and future directions. *Journal of Cleaner Production*, 2020. 277. DOI:10.1016/ j.jclepro.2020.124044. The article was published in 2020, and the total cites received in 2021 and 2022 was 13 and 24. The 2021 and 2022 Impact Factor of *Journal of Cleaner Production* were both 11.1, thus ACCI-1(Contributing Factor) = (13-11.1)/11.1 = +0.17, ACCI-2(Contributing Factor) = (24-11.1)/11.1 = +1.16. This paper had brought positive effect on the JIF. This paper had been higher citations in influence than others.

**Conclusions.** The ACCI is an important index for scholars to carry out research and academic journal editors to select proper papers. For authors, who can use ACCI to categorize articles from a particular journal or in a particular year, the articles that ACCI>0 would fell into positive group, then use other bibliometric tools to mine the specific scientific view. And for academic journal editors, the author's citing performance can be reflected by their ACCI report. Therefore, the bibliometric index-Article