# Article information:

Effect of Exercise Intervention on Internet Addiction and Autonomic Nervous Function in College Students  
<https://www.hindawi.com/journals/bmri/2022/5935353/>

# Article summary:

1. A 12-week physical exercise intervention (jogging, basketball, and outdoor training) significantly reduced the degree of Internet addiction, depression, and improved sleep quality in college students with Internet addiction.

2. Heart rate variability (HRV) analysis showed that physical exercise intervention improved sympathetic parasympathetic function in college students with Internet addiction.

3. Exercise-based intervention might be an effective way to alleviate or even eliminate Internet addiction.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "Effect of Exercise Intervention on Internet Addiction and Autonomic Nervous Function in College Students" investigates the effects of physical exercise on sleep quality, harmful mood, and heart rate variability (HRV) in college students with internet addiction. The study involved 46 college students with internet addiction who were randomly assigned to either the internet addiction group or the internet addiction exercise group. The IA+EX group underwent physical exercise for 12 weeks, while the IA group did not perform regular physical exercise during the experiment.

The study found that after 12 weeks of exercise intervention, compared to pre-exercise intervention, the scores of IAT, CES-D, and PSQI significantly decreased in the IA+EX group. Additionally, LFn and the ratio of LF/HF significantly decreased, and HFn significantly increased in the IA+EX group. However, there were no significant differences in these indexes before and after the experiment in the IA group.

The article provides valuable insights into how physical exercise can reduce internet addiction and depression while improving sleep quality and balancing sympathetic parasympathetic function. However, there are some potential biases and limitations to consider.

One limitation is that the sample size is relatively small, which may limit generalizability. Additionally, there is no control for other factors that may affect HRV or mood changes such as diet or medication use.

Another potential bias is that only positive effects of exercise intervention are reported without exploring any negative effects or risks associated with it. This one-sided reporting may lead readers to believe that exercise intervention is entirely safe without considering possible risks such as injury or exacerbation of existing health conditions.

Furthermore, while the study suggests that physical exercise can be an effective way to alleviate or eliminate internet addiction, it does not explore other interventions such as cognitive-behavioral therapy or family group therapy. Therefore, it cannot be concluded that exercise-based intervention is superior to other interventions.

In conclusion, while the article provides valuable insights into the potential benefits of exercise intervention for internet addiction, it is important to consider its limitations and potential biases. Further research with larger sample sizes and control for other factors is needed to confirm these findings. Additionally, exploring other interventions and their effectiveness in treating internet addiction is necessary to provide a comprehensive understanding of this issue.

# Topics for further research:

* Cognitive-behavioral therapy for internet addiction
* Risks and side effects of exercise intervention
* Family group therapy for internet addiction
* Long-term effects of exercise on internet addiction
* Comparison of different interventions for internet addiction
* Impact of diet on heart rate variability and mood changes

# Report location:

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