

校园绿地对疫情期间短期视疲劳的干预效应：一项试点研究

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摘要:【目的】新冠疫情期间实行的一些政策延长了学生使用电子设备的时间，这增加了视疲劳发生的风险。为确定不同校园绿地对视觉疲劳的恢复作用，本团队实施了此项试点研究。【方法】本研究招募了 20 名在校生（10 名男性和 10 名女性），依据量表结果探讨了他们在校园内不同类型的绿地（道路绿地、运动场、广场绿地和林地）中视疲劳的恢复效果。【结果】与室内环境相比，学生经过 15 分钟的在线学习积累的视疲劳在 10 分钟的绿地暴露后得到了明显的缓解，并且恢复效果因绿地类型的不同而不同。研究发现，视疲劳的缓解效果与温度、风速、天空比例、郁闭度、树木密度和太阳辐射强度呈正相关，而与相对湿度呈负相关。【结论】这些发现丰富了关于绿地健康效益的研究，并为预测不同环境对缓解视疲劳的作用提供了基础。

关键词: 校园景观；绿地；新冠疫情；视疲劳；恢复效益

The Intervention Effect of Campus Green Spaces on Short-Term Eye Strain During the COVID-19 Pandemic: A Pilot Study

Abstract: 【Objective】 Some policies implemented during the pandemic extended the time that students spend on electronic devices, increasing the risk of physical and eye strain. However, the role of different environments on eye strain recovery has not been determined. 【Method】 We recruited 20 undergraduate students (10 males and 10 females) from a university in eastern China and explored the restoration effects of their eye strain in different types of spaces (wayside greenspace, a playground, a square, and woodland) on campus through scale measurements. 【Result】 The results showed that the eye strain of the students accumulated by 15 min of e-learning was significantly relieved after 10 min of greenspace exposure compared to the indoor environment, and the recovery effect varied depending on the type of landscape. The effect of eye strain relief was found to be positively correlated with temperature, wind speed, visible sky ratio, canopy density, tree density, and solar radiation intensity, while it was negatively correlated with relative humidity. 【Conclusion】 These findings enrich the research on the restoration benefits of greenspaces and provide a basis for predicting the effect of different environments on the relief of eye strain.

Key words: campus landscape; greenspace; COVID-19; eye strain; restorative effects.