



Blue Light Boosts Elderly Sleep Quality: Study

Description

Older people may sleep better if they get blue light in the morning. This can help them have more energy for their daily activities. Researchers from the University of Surrey in the UK studied 36 volunteers aged 60 or over. They tested how the volunteers reacted to two-hour sessions of blue and regular white light twice a day over a few weeks.

As people get older, they spend less time outside and more time with artificial light. This can affect their body clocks and sleep. The study found that morning blue light led to better sleep quality and more daily activity, while evening exposure made it harder to fall asleep.

Getting light during the day was also helpful. It increased activity levels and made people go to bed earlier. Blue light has been shown to improve moods and alertness. By using blue light in the morning and getting enough daylight, older adults can sleep better and stay active.

Vocabulary List:

1. **Volunteers** /ˌvɒl.ənˈtɪərz/ (noun): People who offer to take part in an activity or provide a service without being paid.
2. **Exposure** /ɪkˈspəʊ.ʒər/ (noun): The state of being exposed to a particular activity or experience.
3. **Alertness** /əˈlɜrt.nəs/ (noun): The state of being watchful and quick to respond.
4. **Activity** /ækˈtɪv.ɪ.ti/ (noun): The state of being active or engaged in a task.
5. **Quality** /ˈkwɒl.ɪ.ti/ (noun): The standard of something as measured against other things of a similar kind.
6. **Artificial** /ˌɑːr.tɪfɪ.əl/ (adjective): Made or produced by human beings rather than occurring naturally.

Comprehension Questions

Multiple Choice

1. What type of light can help older people sleep better in the morning?

Option: Blue light
Option: Green light
Option: Red light
Option: Yellow light



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2. How many volunteers aged 60 or over were studied in the research?
- Option: 24
 - Option: 36
 - Option: 48
 - Option: 60
3. According to the study, how did morning blue light affect sleep quality?
- Option: Improved sleep quality
 - Option: Worsened sleep quality
 - Option: No effect on sleep quality
 - Option: Random effect on sleep quality
4. What type of light exposure made it harder for people to fall asleep?
- Option: Morning blue light
 - Option: Evening blue light
 - Option: Morning white light
 - Option: Evening white light
5. What was a positive outcome of getting light during the day?
- Option: Decreased activity levels
 - Option: Increased activity levels
 - Option: Delayed sleep time
 - Option: No impact on sleep time
6. Which journal published the research on blue light and sleep in older adults?
- Option: Journal of Sleep Research
 - Option: GeroScience
 - Option: Journal of Aging Studies
 - Option: Journal of Light Therapy

True-False

7. The study found that evening exposure to blue light improved sleep quality.
8. Morning blue light exposure led to increased daily activity in older adults.
9. Older adults who receive blue light in the morning go to bed later.



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10. Blue light has been shown to have no impact on alertness.
 11. The University of Surrey researchers studied 60 volunteers aged 70 or older.
 12. The study results indicated that using blue light in the morning can help older adults stay active.

Gap-Fill

13. The researchers from the University of Surrey studied _____ volunteers aged 60 or over.
14. Morning blue light exposure led to better sleep quality and increased _____.
15. Getting light during the day increased activity levels and made people go to bed _____.
16. The study found that blue light improved moods and _____.
17. The research on blue light and older adults was published in the journal _____.
18. Using blue light in the morning and getting enough daylight can help older adults sleep better and stay _____.

Answer

Multiple Choice: 1. Blue light 2. 36 3. Improved sleep quality 4. Evening white light 5. Increased activity levels 6. GeroScience

True-False: 7. False 8. True 9. False 10. False 11. False 12. True

Gap-Fill: 13. 36 14. daily activity 15. earlier 16. alertness 17. GeroScience 18. active

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. What provides a sense of release or relief from stress or pain?



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- Option: Strain
Option: Ingesting
Option: Alertness
Option: Health
2. What are small plastic pieces less than five millimeters long?
Option: Quality
Option: Microplastics
Option: Boost
Option: Activity
3. What is the presence of harmful substances in the environment?
Option: Concern
Option: Pollution
Option: Potential
Option: Contribute
4. At what point do nitrogen-vacancy centers get formed in diamonds?
Option: Wisely
Option: Formed
Option: Boost
Option: Activity
5. What is the state of being fully awake and able to think clearly?
Option: Groggy
Option: Alertness
Option: Relieve
Option: Persistent
6. What is the regular geometrical arrangement of points in space?
Option: Quality
Option: Lattice
Option: Boost
Option: Activity
7. What is water or other liquid diffused in a small quantity as vapor or within a solid?
Option: Health
Option: Moisture
Option: Activity
Option: Concentration
8. What term describes something that is not clear or sharply defined?
Option: Blurry



- Option: Ingesting
- Option: Quality
- Option: Concern

9. Which word means to do something with good judgment or sense?

- Option: Wisely
- Option: Relief
- Option: Groggy
- Option: Concentration

10. Which word is used to describe the condition of being active?

- Option: Health
- Option: Moisture
- Option: Activity
- Option: Concern

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. Persistent exposure to loud noise can cause _____ on the ears.
12. _____ microplastics through contaminated water can pose serious health risks.
13. Artificial intelligence has the potential to enhance the _____ of healthcare services.
14. After a long flight she felt _____ and unfocused.
15. Yoga and meditation can help improve mental _____ and focus.
16. Researchers are investigating the _____ of quasicrystals for various applications.
17. Regular exercise can provide a natural _____ to energy levels.
18. Maintaining proper hydration levels is essential for good _____.
19. The children engaged in various outdoor _____ to stay active.
20. Practicing _____ eating can help individuals make healthier food choices.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)



21. Concerns regarding plastic waste and industrial emissions have raised awareness about environmental .
22. Scientific in the field of medicine have led to advancements in treatments for various diseases.
23. After a good night's sleep she woke up feeling and ready for the day ahead.
24. Volunteers regularly their time and skills to help those in need within the community.
25. The fire alarm rang prompting everyone to be and evacuate the building.
26. The new technology shows great for revolutionizing the way we communicate.
27. The unique properties of a lattice structure have intrigued researchers for decades.
28. The arrangement of atoms in a crystal forms a repeating pattern.
29. The centers in diamonds play a crucial role in quantum sensing applications.
30. Cooking food using a oven is a convenient and time-saving method.

Answer

Multiple Choice: 1. Health 2. Microplastics 3. Pollution 4. Formed 5. Alertness 6. Lattice 7. Moisture 8. Blurry 9. Wisely 10. Activity

Gap-Fill: 11. strain 12. Ingesting 13. quality 14. groggy 15. concentration 16. potential 17. boost 18. health 19. activity 20. mindful

Matching sentence: 1. pollution 2. discoveries 3. refreshed 4. contribute 5. alert 6. potential 7. quasicrystal 8. lattice 9. nitrogen-vacancy 10. microwave

CATEGORY

1. Health - LEVEL2

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