

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** /,vpl.ən'tɪərz/ (noun): People who offer to take part in an activity or provide a service without being paid.

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- 2. **Exposure** /ɪkˈspoʊ.ʒər/ (noun): The state of being exposed to a particular activity or experience.
- 3. Alertness /ə'lɜrt.nəs/ (noun): The state of being watchful and quick to respond.
- 4. Activity /æk'tɪv.ɪ.ti/ (noun): The state of being active or engaged in a task.
- 5. Quality /'kwpl.i.ti/ (noun): The standard of something as measured against other things of a similar kind.
- 6. Artificial /,a:r.tɪ'fɪʃ.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



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.



- 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 be16. The study found that blue light improved moods and	d
10. 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 adul	ts 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?





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? NEWS.CO

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. I	ersistent exposure to loud noise can cause on the ears.
12.	microplastics through contaminated water can pose serious health risks.
13. /	rtificial intelligence has the potential to enhance the of healthcare services
14. /	fter a long flight she felt and unfocused.
15. `	oga and meditation can help improve mental and focus.
16. I	esearchers are investigating the of quasicrystals for various applications.
17. I	egular exercise can provide a natural to energy levels.
18. I	laintaining proper hydration levels is essential for good
19. ⁻	he children engaged in various outdoor to stay active.
20. I	racticing eating can help individuals make healthier food choices.
Mat	ching 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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