

## **Daytime light exposure and feelings of vitality: Results of a field study during regular weekdays**

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### **Highlights**

- Little is known about the effect of light exposure on human daytime functioning.
- We explored the relation between daytime light exposure and vitality in everyday life.
- Participants who were exposed to more light experienced more vitality.
- This relation was most pronounced in the morning and when persons felt less vital.
- Results provide support for the relevance of light exposure for day-active persons.

### **Abstract**

In the current study, we investigated daily light exposure and its relation with vitality in everyday settings on an hour-to-hour basis. The method consisted of experience sampling combined with continuous light measurement and a sleep diary during three consecutive days. Data collection was distributed over a full year. Results revealed substantial inter- and intra-individual differences in hourly light exposure. The amount of light experienced was significantly related to vitality, indicating that persons who were exposed to more light experienced more vitality, over and above the variance explained by person characteristics, time of day, activity patterns and sleep duration during the previous night. This relationship was more pronounced in the morning, during the darker months of the year and when participants had experienced relatively low vitality during the previous hour. Overall, the results provide support for acute effects of light exposure on feelings of vitality during daytime, even in everyday life.

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