The Effects of Sleep on Optimism and Memory

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Our results demonstrate that there is a connection between optimism and sleep in teenagers. Interestingly, the number of total minutes of average sleep per night was not strongly correlated with optimism score (R2 = 0.176). However, the percentage of a night's sleep that was deep sleep was strongly correlated with optimism (R2 = 0.608) suggesting that sleeping long enough to achieve a state of deep sleep had a beneficial impact on mood. Our analysis shows that the lowest optimism scores come from individuals who get both the least and the greatest amount of sleep and the highest overall optimism scores came from individuals who slept between these two extremes. This suggests that lack of sleep has a negative impact on mood and excessive sleeping may act as a coping mechanism for more depressed/less optimistic individuals. We were interested to see if an individual's optimism score was correlated with the likelihood of remembering more positive details in an invented news story. Our research showed that while optimism isn't strongly associated with memory per se, (R2 = 0.102) LOT-R scores show a positive correlation with the percentage of positive details remembered as a percentage of the total, suggesting that being optimistic increases an individual's likelihood to view the world more positively (R2 = 0.22). Therefore more optimistic people tend to selectively remember a greater percentage of positive details which is likely to have a beneficial (and protective) effect on their optimistic outlook.

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