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You Will Feel Better After a Good Night's Sleep. Really.

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At one point or another, most of us have been told that we will feel better after getting a good night of sleep. You may have gotten this advice after receiving some upsetting news, when dealing with a difficult problem or situation, or after experiencing a major disappointment. It is also likely that this advice came from a caring friend or family member who was hoping to provide some support. It turns out that this advice is more than supportive - it's backed by science!

Our problems won't magically disappear after getting a full night of sleep (wouldn't that be nice if they did?). However, we will be better able to manage our emotions and the challenges of day-to-day life. In fact, sleep holds quite a bit of power over our emotional lives.[1]

We have learned how sleep impacts our emotional health from research that limits ("restriction") or removes ("deprivation") sleep for one or two nights. In one well-known study,[2] young adult participants were randomly split into groups. One group received a full night of sleep. The other group spent the full night awake. The next day, all participants laid in a brain scanner and viewed emotional images. When looking at negative images, the participants who stayed awake all night showed a large increase in activity in a small brain structure called the amygdala, compared with participants who slept.

Importantly, the amygdala controls how strongly we react to emotional information. This study showed that the amygdala was less able to communicate with the prefrontal cortex in the group who stayed awake. The prefrontal cortex is the brain region that helps us manage our behavior in emotional situations.

So, not only does sleep loss make us more emotionally reactive, it also reduces our ability to manage emotions. What does that mean? This relationship can be very clearly seen in children.

Sleep loss has a similar, maybe even greater, effect on children's emotions. Every parent of a young child knows that a missed nap or bad night of sleep is often followed by a tantrum or "emotional meltdown". My research team completed a study that captured the negative impact of sleep loss in children.[3]

In this study, school-aged children experienced two nights of reduced sleep. We then examined their ability to suppress or control their emotional responses while watching emotional movie clips. How? We used respiratory sinus arrhythmia (RSA) – an objective measure of emotion regulation.

When facing stress or an emotional event, a decrease in RSA is thought to reflect a healthy, adaptive response. However, our results showed that children who experienced reduced sleep had an increase in RSA when watching emotional movies (regardless of whether the content was positive or negative). This suggests that children had a much harder time controlling their emotions after not getting enough sleep.

Humans try to manage their emotional responses in many ways. For one, we may simply suppress them. Some other ways include taking a long walk outside, going to the gym, or calling a friend to try to improve your bad mood. Unfortunately, if you haven't slept enough, it's likely that these strategies may not help you feel better. This is partly because sleepiness makes you less motivated and have less energy for all types of activities (physical and social activities).[4] One study found that after sleeping for just 4 hours, young adults were less motivated to pursue social interactions with others compared with those who slept for 8 hours.[5] This is partially because poor sleep reduces positive emotions (even during positive events!).[6] In fact, more and more evidence suggests that poor sleep takes a greater toll on our positive emotions than our negative ones.[7] So, even if you are able to get yourself to the gym or to spend time with a friend, if you haven't had enough sleep, these activities will be less enjoyable. Why do emotions (and how well we manage them) matter so much in the first place?

Whether we are aware of emotions or not, they are always present. Emotions act as important signals. They rule the day-to-day choices we make: from small decisions (like what we eat for dinner) to life-changing choices (like who we marry). However, not every emotion we feel is helpful. Many emotions are not helpful. These unhelpful emotions need to be regulated rather than expressed to avoid some type of harm (like being rude to your boss when you're angry about having to work late).

Ultimately, the research provides a possible answer to how the ability to effectively manage our emotions impacts academic, occupational, athletic, and social outcomes. That is why it is important to be mindful of all the factors that influence our emotions and our ability to effectively manage them.

Anything that interferes with our ability to effectively manage our emotions can result in negative outcomes. Not getting enough sleep is at the top of this list. So, it is time to prioritize sleep!

References

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