## **Are We Losing Our Minds?**

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I can only imagine what they are thinking:

....Meetings and lectures are boring. Too many people talk about this and that and go on and on, discussing irrelevant things. I am a busy guy and they are just wasting my time. I have to get things done. I am behind on my e-mail and I have to check the weather, news, Internet, and sports scores. Good thing I have a smart phone. Now when someone takes a pause, I can take care of the important things and use my time efficiently. Now when I go to a lecture, I can be productive rather than having to listen. So what if recent research has found that we really cannot multitask as well as we thought we could.1,2 So what if by not paying attention, I am actually not attending to anything at all and am unable to discern what may or may not be important or salient? So what if I am never in the 'here-and-now,' but instead always in the 'there-and-then?' It is different these days. I can listen, talk, text message, surf the internet, and read and send e-mail at the same time. I can be actively engaged in a meeting and do all those other things. I am sure that others will understand, since they are doing it also .....

I wonder if they know something that I do not know, if they are able to do something that I cannot do, or if they are blissfully unaware of the effect that their rude multitasking has on the people around them who are speaking and would like their full attention. What I do know is that many who multitask seem to do it compulsively and it appears that something about it is quite reinforcing. What is going on? I wonder if part of the answer comes from sleep research.

## SLEEP AND DAYDREAMING

Robert Stickold, PhD, at the Beth Israel Deaconess Hospital in Boston, studies sleep and its purpose. He asks, "Why do we sleep? What does it do to our minds? What happens to our cognitions with sleep?" He has found that our brains are processing a lot of the information that we have been exposed to during the day, getting the gist of what happened and mulling it over.3 We are taking what we have taken in during the day and consolidating our memories. If we learn a physical task, eg, a sequence for a musical instrument, we will learn it better upon repeating it if we sleep on it than if we have the same time interval from learning to repeating it during the same day, but we have not slept. Our minds are producing something, something that comes from our internal experience after having been exposed to stimuli in our environment.

Stickold worries that our sleep-deprived culture could be one of the reasons behind the increase in psychiatric disorders observed. With constant sleep deprivation, many no longer have the benefit of sleep-associated memory consolidation. If we need that consolidation, what happens when we do not have it? If we need to produce consolidation without any further input from the environment, what happens if we do not let our minds produce much of anything anymore? Stickold's concerns about the effects of not allowing our minds to produce consolidation during sleep extend to a dearth of daydreaming. If we are constantly plugged-in, online, with earphones (iPod, mp3 player) in or in front of

a screen (desktop, laptop, netbook, iPad, smartphone), many of us rarely let our minds wander or daydream. Are we depriving ourselves of opportunities to leisurely process information, to go slowly over a complex problem, to mull over material that is challenging to understand, to integrate and make new connections between disparate ideas? Are we too quick to come to conclusions, too reactive to too many inputs so that we are less able to discern what is important? As a result, are we eroding our capacity for critical and careful thinking or creative and flexible problem solving that could lead to wisdom?4,5 If we multitask, are we doing ourselves and our minds a disservice or are we training it to, well, multitask? Multitasking, while allowing us to skim over information, could prevent us from knowing what is or is not important and could cause chronic stress.

## SLEEP DEPRIVATION AND MULTITASKING

If, in our pursuit of efficiency and our need to be in constant contact we are in some yet-to-be precisely defined constantly distracted state, what are the possible remedies? Sleep, space, and time. Multiple studies converge that strongly suggest good sleep hygiene is healthy and that sleep deprivation (with attempts on weekends to make up for the lack of sleep during the week) is not good for you.<sup>6</sup> "Get enough sleep" sounds like "eat your

vegetables." This is easily said and recommended to other people, but difficult to implement in our own very busy lives. What would happen if we allowed ourselves to get enough sleep every night, perchance to dream? Similarly, at the very least, we could find the space and time to unplug, minimize multitasking, and let our minds be free of inputs and to think deeply and process events. In contemplation, quietness, and mindfulness, we might do ourselves a great favor and find ways of being that are better than being constantly glued to our smart phones and tyrannized by the torrent of e-mail. Only then can we truly listen with the added benefit that we might become more civil and respectful to a speaker, whether at a meeting or a lecture. Only then, might we relearn how to sustain attention, how to integrate complex facts and thoughts, and find the minds that we are in danger of losing. CNS

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