

P430 FALL2010 B SAMPLE

Topic 1: Tired in Topeka

Advice Column

To all parents and future parents,

It has been an issue on the rise for many years now that the amount of sleep can affect cognitive abilities. It is always very important to get a good night sleep for the day ahead as many of us adults know. The reason that I am writing this column is to further parents and future parents' knowledge of the topic. The question of late is, "Does the amount of sleep that infants and children get, have an effect on their cognitive learning abilities?" It is a very good question and is a great possibility that this could be true. With all of the great technology that has developed over the years we become one step closer to finding a solution to this question. I want to take the time now to share with you some of the findings that I have found that should help in answering this question.

One of the most important things for infants and children is to get a sufficient amount of sleep while they are in the early stages of development and life. In a study by Beswik (et al. 2009) they found that children who slept at least 8 hours had very strong learning behaviors whereas children who had 7 hours or less of sleep had weak learning related behaviors. This study confirmed that children who do get more sleep tend to have a far better growth rate of learning. In another study done by Hupbach (et al. 2009) they looked at how naps would affect cognitive learning in 15 month old infants. What they came to find was that children who had done a cognitive learning activity 4 hours prior to napping had a better memory of the task 24 hours later, thus proving that napping after a cognitive task can increase learning ability. A very similar study was performed a few years earlier by Bootzin (et al. 2006) showing that there was not a significant amount of difference between remembering familiar tasks and unfamiliar tasks prior to napping. Indeed this study does not show an advantage in napping neither does it say it hinders the children or infants as well. In a final study done by Adamson (et al. 2008) they too looked at the sleep wake cycles of infants and found that after studying children at three different ages increased sleep was linked with increased approachability. This study does not look at cognitive development but instead shows that children who get more sleep are indeed much more approachable and enjoyable to be around. Each of these studies has shown that an appropriate amount of sleep is required to gain an increased learning ability. With this said I want to give a few recommendations based on the conclusion that children do need a sufficient amount of sleep so that they can not only be approachable but also be cognitively ready to learn.

To all the parents out there that have read this and are looking for answers on how much sleep your child or infant should get and whether or not it can affect their ability to learn and cognitively develop; I hope that you will remember a few important things. First, your infant needs at least 8 hours of sleep in order to have strong increased learning behaviors. It is also

important to remember that too little sleep can cause temperament for your child or infant which can lead to a weakness in approachability. If you want your child to have the best opportunity to cognitively develop I would suggest that you as a parent provide them with the right sleep schedule. Finally, whether they nap or not has failed to show that they are decreasing cognitive development but it has indeed shown that it increases cognitive development. The most important thing for your children is to get at least 8 hours of sleep whether it be 6 over night and 2 during that day in a nap, 8 or more is the desired goal for increasing your children's cognitive learning abilities.

### **References:**

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3. Adamson Michael T., Aitken Rebecca J., Charlton Margaret, Horne Rosemary S.C., So Kevin, Spruyt Karen. (2008). Relationship between sleep/wake patterns, temperament and overall development in term infants over the first year of life. *Early Human Development*, 84, 289-296.
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