

# [Comparative sleep study of basic a b control to](https://assignbuster.com/comparative-sleep-study-of-basic-ab-control-to/)

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Comparative sleep study of basic A/B control to Evaluate the alternate breathing method Alonzo Marroquin Jr. Abstract This paper explores several published articles that report on results from research conducted on a sleep study over a span of six days that comprised of normal conditions of sleep patterns and the alternate breathing method. Evaluate and suggest if there is any satisfactory evidence on both studies that validate the finding of quality aided sleep. From an investigative standpoint, the comparison of normal sleep and alternate nostril breathing prior to falling asleep can justify that quality both ways benefit sleeping at night. This study will provide a documented tracking on three days of normal sleep and three days of alternate nostril breathing prior to sleep. Described and analyzed cultural and ethical implications of natural vs. medical remedies for sleep, including some strengths and weaknesses. Analyze biological perspective to the claim of relevance that can support this technique. Covering the scientific perspective the process of research and which components this study including Eastern medicine versus Western medicine. This study will provide a thesis and a hypothesis and if there is any correlation to better quality sleep from alternate nostril breathing works as a natural sleep aid. Exam if there are any skeptical aspects during the scientific method. Comparative sleep study of basic A/B control to evaluate the alternate breathing method Sleeping is something we spend doing approximately one third of our human life cycle and can vary in quality from one night to another and have a tremendous impact on our daily performance when we awake the next morning by either having a lousy day or having a productive day. “ Some 70 million people in the United States have a sleep problem. About 40 million adults suffer from a chronic sleep disorder; an additional 20 — 30 million have intermittent sleep-related problems (Berman, 2011). " Many people have difficulty with sleep and don’t give sleeping a second thought as to why they might only slept for a few hours, and complaining about having problems throughout the whole day, and not cognizant of a sleeping disorder or medical problems directly related from sleeping. Today, there are many variables that can affect us such as faster paced lifestyles, more nightshift workers, and seems to not be enough hours in the day to accomplish many tasks so we sacrifice valuable sleep. Conducting a comparative sleep study to evaluate normal and alternate breathing method to see which is more effective from a biological perspective, the cultural and ethical implications of natural versus medical remedies for sleep, the scientific perspective that some people might be skeptical, and provide personal data from sleep comparison. Sleep study results The first three nights of using no sleep aids prior to going to sleep during the normal phase was very easy for me since I work a night shift and go to sleep within 15-20 minutes when I arrive home in the early a. m. My routine is simple brush teeth, change clothes, drink a glass of water, and lock all the doors to the house before getting into bed. I easily fall asleep each night within five minutes of lying in the bed. Thirty years ago, I took a course called Silva mind control which taught me how to understand and control my body, breathing, and to go into a pattern of deep relaxation within minutes and have been successful ever since. I still wake up after five hours to go to the restroom and then return to bed until I wake up each morning at 10: 30 — 10: 45 a. m. My sleep pattern is very consistent and I averaged approximately 7 ½ hours of sleep a night. My overall rate of restfulness score was 9. 5 During the Alternate breathing phase, I did my normal routine until I got into bed, I started the breathing exercises for 10 times then laid for a few minutes to evaluate what had transpired. I felt that my breathing rate had slowed down somewhat after the second day and I seemed to be calmer before actually falling asleep. . I still wake up after five hours to go to the restroom and then return to bed until I wake up each morning at 10: 30 — 10: 45 a. m. My sleep pattern is very consistent and I averaged approximately 7 ½ hours of sleep a night. My overall rate of restfulness score was 9. 5 The difference between the two conditions of normal versus alternative nostril breathing were insignificant but I did like the idea of being a little more calm with the alternate breathing prior to falling asleep. The hypothesis of the alternative nostril breathing does substantiate as a natural sleep aid was not supported through this study. I believe my mediation method is more effective than the alternate breathing method overall. Biological Perspective From a biological perspective, alternate breathing method can be a viable method towards a natural sleep aid for some people and if used on a long term basis and reduce breathing rate and the effects on the behavior. The nervous system, the brain, respiratory system, and the immune system but ultimately all organs interconnected. These claims make a lot of sense biologically since this directly has a grip on our behavior if we get or don’t get enough sleep or quality sleep. Sleep isn’t merely a time when your body and brain shut off. While you rest, your brain stays busy, overseeing a wide variety of biological maintenance tasks that keep you running in top condition and prepare you for the day ahead. “ Darwin — His theory of natural selection published in his book “ The Origin of Species" (1859) was a major influence on the biological perspective. Darwin was advocating not only the inheritance of characteristics, but also an evolutionary link between humans and all other species. Even though, his theory caused much controversy, it laid the basis for the study of hereditary influences on behavior (Fuller et al, n. d.). " This method would work biologically from an empirical studies standpoint. Many books and studies over the past 140 years and provided evidence to support this from Freud, Erikson, Levinson, and Piaget. Cultural and Ethical Implications Most people need about seven to eight hours of sleep each night and the lack of sleep can cause problems like an increases risk of hypertension and heart disease, and lowers the immune system, irritability and moodiness, and have the person potentially susceptible the flu and colds. Natural remedies for improving sleep far outweigh other methods because it carries the most benefits that would be beneficial to your body. Several ideas to name a few are proper diet, herbal medicines, herbal teas, relaxation techniques, exercise, aromatherapy, music, acupuncture, and the possibilities are endless. Drinking teas and adding honey is a nice touch that contains antioxidants for better health and to calm the mind and body and is a great regiment to do before going to sleep. Relaxation techniques have a variety of methods such as yoga, progressive muscle relaxation, visualization. Yoga - combines deep breathing, meditation, and stretching. A Harvard study found that daily yoga for eight weeks improved total sleep time, the time to fall asleep, and if you've never tried yoga before, not to worry (Wong, 2011). Medical remedies for sleep would be considered a practical solution for short term use only; however, they often make the problem worse over longer periods of time. Taking these medicines for longer periods may develop an addiction if not used correctly. The strengths of this are and some the weaknesses can vary in range from dizziness, groggy, lack of coordination, forgetfulness, constipation, urinary retention, blurred vision, and dry mouth and throat. Some chemical can have an adverse reaction in the body in not taken properly or consult a physician. The main concept is to find the root cause of the insomnia and not momentary Band-Aid the situation. Cultural implications of natural and medical remedies can be ascertained by a belief system of the person treating or helping to fix the sleep situation because we now live in a multicultural society in America. Some concerns including health professional and family values or trying to impose new ideas can have an impact on current society values of a person and can take decades to reverse the change. Ethical implications of medical remedies can have a more serious consequences is not dealt with properly such getting addicted to a drug and having more problems to treat besides the insomnia. The natural approach is the first measure unless not corrected, and then professional help should be sought. Scientific Perspective The scientific method is based on Empirical or measurable evidence and consists of the following systematic observation, measurement, and experiment, and the formulation, testing, and the revising the hypothesis. See below, diagram 1. The primary function is to inquiry of the knowledge to speak for itself, and support the theory confirmed and challenged. Hypotheses are explanations of designed experimental studies. The scientific method is following the steps to replicate the process to prove the validity of the hypothesis with little or no bias. Scientific methods are used in various studies such as experimental research involving rigorous testing data and generating some statistically data. The skepticism from this technique can be part of problem because of the biases from external sources or ethical considerations. Potential objective issues such as Western medicine versus Eastern medicine can have very diverse philosophies that have some cultural drawbacks when looking or approaching a problem. Eastern medicine belief is a balance between mind, body, and spirit. Primary focuses on prevention and management of chronic illness, and the recognition of the importance of lifestyle and the mind/body connection. Western medicine belief is health is the absence of pain, symptoms, and physical or mental defects. Both medicines offer many benefits, however the approach or the ideology may differ and the end result is the patient’s well-being. “ In the Western world we are required to scientifically test and prove the efficacy of the treatments prescribed to patients. Extensive testing and laborious research is done in phases and then presented to the FDA for approvals before patients can be prescribed new and innovative treatment, testing and imaging options. Eastern medicine is not as regulated and therefore not scientifically proven and because it is less understood, it is typically relegated to a voodoo status" (Pavlov, 2010). [pic] References Berman MD, M. (2011, March 8). It's National Sleep Awareness Week! MedPage Today. Retrieved July 24, 2012, from http://www. medpagetoday. com/Blogs/CelebrityDiagnosis/25223 Danucalov, M., SimÃµes, R., Kozasa, E., & Leite, J. (2008). Cardiorespiratory and Metabolic Changes during Yoga Sessions: The Effects of Respiratory Exercises and Meditation Practices. Applied Psychophysiology & Biofeedback, 33(2), 77-81. doi: 10. 1007/s10484-008-9053-2 Fuller, T., Perez, G., & Espinosa, V. (n. d.). The Biological Perspective. International Counselor. org. Retrieved July 21, 2012, from http://www. internationalcounselor. org/Psych/Biological/biological\_review%20notes. htm Fogarty, Carole. " 12 Great Reasons To Start Alternate Nostril Breathing:." Rejuvenation Lounge. The Living Lounge, 2009. Web. 21 July 2012. http://thehealthylivinglounge. com/2009/06/16/12-great-reasons-to-start-alternate-nostril-breathing-today/ Pavlov, M. D., Helene. " The 'Voodoo' Eastern Medicine Vs. The Tested (And FDA Approved) Western Medicine." The Huffington Post. TheHuffingtonPost. com, 14 Jan. 2010. Web. 29 July 2012. http://www. huffingtonpost. com/helene-pavlov/the-voodoo-eastern-medici\_b\_419873. htm Raghuraj, P. P., & Telles, S. (2008). Immediate Effect of Specific Nostril Manipulating Yoga Breathing Practices on Autonomic and Respiratory Variables. Applied Psychophysiology & Biofeedback, 33(2), 65-75. doi: 10. 1007/s10484-008-9055-0 Wong, C. (2011, October 5). Sleep Aids. About. com Alternative Medicine. Retrieved July 26, 2012, from http://altmedicine. about. com/cs/conditionsitoq/a/Insomnia. htm