Nursing Student’s Stress Treatment Study: A Cluster Randomized Trial

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Purpose: The Energy Pod and SleepWing has been used successfully in decreasing stress and agitation in many adolescent and young adult patients seeking stress reduction for crisis issues. This study evaluated the efficacy of the Energy Pod and SleepWing in decreasing stress and anxiety for nursing students who presented with self-identified fatigue, stress, agitation and/or mild anxiety symptoms. EnergyPod and/or SleepWing are noninvasive, nonintrusive, benign units. The EnergyPod is an innovative solution to the problem of where to take a brief nap at work. It has ergonomic functionality to create the ideal energy-enhancing environment that allows individuals to boost their personal and professional productivity while supporting a healthy lifestyle. The unit has both a built in timer and music player with headphone jacks and speaker system. After the 20-minute rest, the unit effectively wakes the user in a gentle manner with a programmable combination of lights and vibration. This device has been utilized in a number of settings from hospital on-call rooms to pilot resting areas. It has been found to improve the functioning of residents when compared with mid-day naps. The purpose of the study was to evaluate the efficacy of two different rest pods designed by MetroNaps for individual relaxation-- EnergyPod and SleepWing-- as a noninvasive intervention for test anxiety in nursing students by measuring impact of the treatment on self-identified fatigue, stress, agitation and/or mild anxiety symptoms.

Methods: The SleepWing/EnergyPod study was conducted in the College of Health and Social Services in the School of Nursing. A convenience sample of baccalaureate nursing students who self-identified as having test anxiety (N=56) completed measures of fatigue, stress, and agitation as Total Mood Disturbance score and subscales from the Profile of Mood States- Short Form (POMS-SF) and blood pressure, heart rate, and respiratory rate. Each participant subsequently rested in the EnergyPod or SleepWing unit for 20 minutes. Variable measures were repeated at the end of the rest period.

Results: A randomized convenience sampling of nursing students at a School of Nursing between the ages of 18 to 60 were asked to participate in this study. Significant improvements were seen in the TMD scores (t=-28.294, p=0.000) as well as in all of the subscale scores except for Vigor. Participants experienced significant decreases in pulse (t=-3.278, p=0.002) and respiratory rate (t=-4.059, p=0.000) after undergoing treatment in the EnergyPod or SleepWing, but did not experience significant improvements in blood pressure. There were no significant differences between the EnergyPod group and the SleepWing group in terms of demographics (age, ethnicity,
race, gender), changes in vital signs, nor changes in the POMS-SF subscores and TMD scores.

**Conclusion:** Nursing students are required to take numerous exams throughout their program of study. The expectation is that these exams prepare students for passing the licensing exam prior to practice. There is an urgent need for schools of nursing to address the problem of text anxiety. This pilot demonstrates one successful method of helping students with test anxiety reduce their stress.

**Title:**
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**Keywords:**
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**Abstract Summary:**
The purpose of the study was to evaluate the efficacy of two different rest pods designed by MetroNaps for individual relaxation. EnergyPod and SleepWing-- as a noninvasive intervention for test anxiety in nursing students by measuring impact of the treatment on self-identified fatigue, stress, agitation and/or mild anxiety symptoms

**References:**

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**Author Summary:** She has combined her skills as a nurse therapist and a family nurse practitioner to promote a holistic view of patient care. Her research interests include adolescent disclosure of health concerns to health care providers, stress reduction, health benefits of journaling, mobile technology, keys to nursing student success, patient/provider communication and the use of Telehealth technology to increase access to care for adolescents in urban and rural settings.

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**Author Summary:** Special Interest and Research: Student success in higher learning. She co-developed the “Student Success Keeper” app in 2013. In 2015, she implemented Omaha System into the RN to BSN program and Nursing Informatics courses. She developed interactive sase-based scenarios and concept-based learning, technology related to virtual reality, telehealth and mobile devices; issues about Adolescent Mental Health and Substance abuse and was involved with Adult and Adolescent behaviors.

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**Author Summary:** Dr. Kuchler received her Doctoral degree from New Mexico State University. She received her Master’s in Nursing Family Nurse Practitioner degree from Saint Francis University, Joliett Ii. She has presented at International, National and State Conferences on a variety of subjects that she has expertise including: Hep C, Adolescent Health and Integrating Primary Care and Mental Health Services.

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**Author Summary:** My research includes mental health disorders; primary care health including pregnancy prevention. Telehealth, Reproductive health, and accessibility. I received my PhD from New Mexico State University in 2009. I appreciate the variety of choices in nursing. As a Psychiatric Nurse Practitioner and a Family Nurse Practitioner I incorporate my expertise to my patients both emotionally and physically. I value and share this with my students. I am the owner of a therapy practice.