Revised Article Critique

Kristie L. Bruesch

Ferris State University

Article Critique #1

 The article “Positive Effects of a Stress Reduction Program Based on Mindfulness Meditation in Brazilian Nursing Professionals: Qualitative and Quantitative Evaluation” by Santos, T., Kozasa, E., Carmagnani, I., Tanaka, L., Lacerda, S., & Nogueira-Martins, L. was a peer reviewed research written in the EXPLORE journal. This journal promotes articles in relation to evidence based healing practices (Explore, 2016).

 The purpose of the study is to provide a Stress Reduction Program to nursing professionals and assess the effects utilizing “mindfulness and loving kindness meditation” (Santos, et al., 2016, p. 90). Background literature of the study was clear and consistent in regards to health professionals suffering from burnout and stress. Literature was provided to show the program has been linked to decrease stress and improve health in the nursing profession. The study used a qualitative and quantitative method. The quantitative method utilized scales and questionnaires as the variable and the Stress Reduction Program (SRP) as the independent variable (Santos, et al., 2016).

 The study used 13 health care workers including nurses, technicians and nurse assistants. The research promoted the volunteers through “emails, posters, and the Universidad Federal de Sao Paulo Press Office” (Santos, et al., 2016, p. 91). Each volunteer was able to perform the study and continue working their hired position. The group then consented to the SRP and attendance was for one hour, four times a week for, six weeks. Exclusions of severe depression or the use of psychotropic medication were assessed using a self-reporting questionnaire and the Beck Depression Inventory. An analysis of variance showed a *p <*0.05 for the pre and post intervention. This also showed a “significant reduction in depression, perceived stress, burnout, and anxiety” (Santos, et al., 2016, p. 93). The follow up score and post intervention scored *p* > 0.05. The qualitative results were measured by the Facets of Mindfulness Questionnaire, and can calculate large numbers on one scale (Santos, et al., 2016). The statistical significance in the quantitative study provided details in regards to the socioeconomic and outcomes for subjects. The qualitative study explored the significance in clinical depression, stress, and anxiety in the volunteers.

 The results of the study were separated in regards to the two study design. The quantitative studied showed significant improvement in depression, stress and burnout. The qualitative study showed improvement of internal and external involvement. Both studies concluded the findings of the results to be in correlation to the purpose. Extensive findings are described in full and suggests the SRP is a realistic method to increase the health in nursing staff (Santos, et al., 2016).

 The study brings awareness and improvements to the health of stressed and burnout nursing staff. The study should be further explored using more participants in various health care settings to have improvement and awareness. This study brings into daily practice for the bedside nurse practice in which stress, depression and burnout has been seen.

Article Critique #2

The article “Mindfulness meditation and the immune system: a systematic review of randomized controlled trials” by Black, D., and Slavish, G., was a peer reviewed research published in the Annals of the New York Academy of Sciences, in the Meditation issue. This academy promotes articles with scientific research throughout the world (The New York Academy of Sciences, 2016).

The purpose of the study is to assess the “effects of mindfulness meditation on immune system parameters” (Black & Slavich, 2016, p. 1) Background literature of the study correlated to mindfulness-based intervention programs and the program exhibiting benefits to the participants. Literature provided is based on participants self-reports at which case is a risk for bias. The study used a systematic review method. The systematic review method utilized literature based off of the randomized control trials looking at the immune system biomarkers.

 The study used 20 studies which were located through databases published between 1966 and 2015. The sample size has a mean of n= 80 with a total of 1602 participants The search used specific terms and inclusions which included studies having a RCT method, mindfulness meditation intervention, bio-markers of immune-related activity, and English language publishing marking the study to be less valid (Black & Slavich, 2016). Exclusions were noted on six studies using a Quasi-experimental study and not a RCT method. Some studies were noted to have potential bias with having more female’s then male subjects. Another portion of the study noted 90% of the cases had venous puncture labs drawn and the other through mucous and skin testing (Black & Slavich, 2016).

 The results of the study were conclusive in evidence “that mindfulness meditation is associated with changes in select biomarkers of immune system activity” (Black & Slavich, 2016, p. 8). However the report did mention the need for further evaluation of the mindfulness meditation on the immune system of the body. Points were discussed in regards to future studies using comparator groups and control groups. Other marks were made for future studies too in-depth to remark.

 In closing, the study showed some invalid approaches with using only English studies and bias to only female subjects. The study provides great potential for future studies to be performed with acknowledgement of mindfulness meditation being healthy to the immune system. Mindfulness meditation could have the potential to help individuals become healthier if further studies provide evidence based practice this program is effective.

Article #3

 The article “An On-the-Job Mindfulness-based Intervention For Pediatric ICU Nurses: A Pilot” Gauthier, T., Meyer, R., Dagmar, Grefe, D., Gold, J., was a peer reviewed research written in the Journal of Pediatric Nursing. This journal promotes topics in “evidence-based practice, quality improvement, theory, and research” (Journal of Pediatric Nursing, 2016).

 The clinical significance of this cohort study is hypothesized with bringing a mindfulness-meditation study to a PICU department in which it “would increase participation and adherence in relation to previous trials of traditional and brief MBSR studies with nurses, and that 5 minutes of facilitated mindfulness would reduce stress and burnout frequencies and increase mindfulness, self-compassion and job satisfaction” (Gauthier, Meyer, Grefe, & Gold, 2015, p. 403). The independent variable is the 5 minute meditation and the independent variable is less stress. Background literature of the study highlighted the area of nurse burnout and lack of teamwork when nurses are placed under high amount of stress. Stress levels can include overtime hours, short staffing and high census of patient making assignments heavier with patient load. Another stress factor for nurses is the inability to find quiet places for breaks. The study is a pilot study and will look at three areas. The first will involve a five minute meditation technique, the second part will review how the nurses react to stress and last the study will examine each person and determine if the stress is related to a specific group (Gauthier, Meyer, Grefe, & Gold, 2015).

The study sample recruited 45 nurses in the PICU department to perform a mindfulness meditation study of a 30 day period. Recruitment was announced in “staff meetings and daily huddles, posted flyers, emails, and individual recruitment” (Gauthier, Meyer, Grefe, & Gold, 2015, p. 404). Of these nurses, 38 of them completed all steps of the study; the pre-study, post-study, and one month post study. All the samples were nurses on a PICU department at an urban hospital. Risk for bias includes a total of 104 nurses who work the PICU and only 45 nurses agreed to participate. Risks include those recruited may feel a heightened stress or varying response to the study as compared to those who did not participate.

Specific scales were used in relation to measuring each classification; job satisfaction, self-compassion, mindfulness, stress, and burnout. The results showed accordingly to the literature in regards to nursing stress at the baseline, showing significant decrease in stress at the second stage and significant decrease in stress at stage three but higher than stage two (Gauthier, Meyer, Grefe, & Gold, 2015). Job satisfaction increased, but was not significant at the third stage. Self-compassion and mindfulness were noted as moderate for baseline with no changes noted for further stages. Personal achievement ranked highest for change in the baseline and increased at stage two but had a decrease in stage three (Gauthier, Meyer, Grefe, & Gold, 2015). Group differences showed moderate to high levels of mindfulness, with no significant changes in stage two or three even with a decrease in stress overall.

The hypothesis stands strong in accordance to the stress nurses have in the workforce. This study would benefit with a much larger group utilizing other facilities. Future research should direct the study in a qualitative measure using randomized control trials (Gauthier, Meyer, Grefe, & Gold, 2015). The research study does not make for a valid research to promote a five minute meditation to reduce stress with the small sample but does stand valid for future research projects.

References

Black, D., & Slavich, G. (2016). Mindfulness meditation and the immune system: a systematic review of randomized controlled trials. *Annals of the New York Academy of Sciences*,

doi: 10.1111/nyas.12998.

Gauthier, T., Meyer, R., Grefe, D., & Gold, J. (2015). An on-the-job mindfulness-based intervention for pediatric ICU nurses: a pilot. *Journal of Pediatric Nursing* , *30,* 402-409 doi:10.1016/j.pedn.2014.10.005

Santos, T., Kozasa, E., Carmagnani, I., Tanaka, L., Lacerda, S., & Nogueira-Martins, L. (2016). Positive effects of a stress reduction program based on mindfulness meditation in brazilian nursing professionals: qualitative and quantitative evaluation. *Explore*, *12,* 90-99 doi: 10.1016/j.explore.2015.12.005.