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## The effect of sound therapy in increasing calmness and reducing stress on working Muslim women in Malaysia

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### Abstract

The aim of this study was to evaluate the efficacy of sound therapy in increasing calmness and reducing stress on working Muslim women in Malaysia. The design of this study was experimental using single group pretest-posttest. Eighty-eight Muslim women who are married and employed, participated in this study and their level of calmness and stress were measured before and after they were given two types of sound therapy intervention, the first being sounds of nature and the second, a recitation of Quranic verse. Both types of sound therapy shows significant increase in participants' calmness and reduction of their stress level but the second type of sound therapy (i.e. recitation of Quranic verse) shows better results than the first type (sounds of nature). These findings demonstrate that an intervention using sound therapy produces positive effects on the body. The result suggests that the use of sound therapy for working Muslim women in Malaysia may improve their calmness and reduce their stress level thus, underscore the need for additional research.

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*Keywords:* sound therapy, stress, calmness, working women, Muslim.

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## **1. Introduction**

Stress has been defined as clusters of work or life demands that result in significant life changes and also events that include daily hassles or everyday irritations. Stress reactions also involve inappropriate physiological, behavioral and/or psychological responses to environmental or stimulus condition (Briggs, 1994). According to Greensburg (1993), too much pressure may lead to hyper-stress, where there are heavy demands or over-reaction in terms of time and responsibilities. On the other hand, too little pressure leads to hypo-stress, whereby individuals suffer from lack of activation, characterized by lassitude and boredom. Therefore, it is natural and healthy to maintain an optimal level of stress, since achievement of success, higher productivity and effectiveness require some amount of stress to 'jump start' individuals.

There are various reasons why an individual become stressful. Almost every individual has their unique sources of stress. Factors that cause stress reactions in individuals are called stressors. Stressors may be environmental factors such as threat to self-esteem, negative thoughts or life events such as death of loved ones (Greenburg, 1993). Individuals may encounter different types of stressors as they age and develop across the life span. Different groups of people may encounter different and unique sources of stress. Stressors experienced may also differ by virtue of one's gender.

Research on women issues indicate that women are more prone to stress as compared to men. In addition, stressors for women also tend to originate from different sources. According to Noraini (2006), women are stressed due to the increasing participation of women in the labor force all over the world and Malaysia is no exception to this development. Despite the women's involvement in the workforce, the religious and social expectations of women as the primary caregiver have never changed. They have to balance the demands of work and family. Combining careers and families, employed women average 15 hours more work per week and a half hour less sleep per night compared to men. Employed women also experience alteration of spousal relationship – disapproval from husband to work regardless of economic necessity and expectation to have a larger share in the family's economic decisions may raise conflict. Another source of stress might be when the women's expectation of her husband to help with the household chores and take care of the children is not met. The nature of the work and workplace may also be another source of stress. Since most women work in the lower status jobs such as secretaries, they cannot escape from unfavorable work conditions. They suffer from job pressure and lack of opportunity for advancement. Sexual harassment is another possible source of stress for employed women. It is common on many work settings although only ten percent of sexual harassment cases are reported. Due to this, an increasing number of women turn to counseling for their stress-related problems (Siti Aishah Hassan & Maznah Baba, 2008).

One of the techniques in counseling to reduce stress is using sound therapy. In recent decades, an enormous amount of research has been conducted on the specific ways in which sound, rhythm and music can improve our lives. The sounds we hear have an immediate effect on our whole system because the ear is directly linked by nerve paths to many other body organs (Collins, 2010). Sound therapy is the use of sound vibrations and frequency for therapeutic effect (Richard & Smith, 2006). Subcategories of sound therapy (Richard & Smith, 2006) include music therapy – the use of rhythm, melody and harmony through singing, dance and instruments to achieve relaxation and creative states of awareness (American Music Therapy Association, 2004), psychoacoustic therapy – the study and use of sound perception (Davis & Vergara, (2008), Hemi-Sync – the therapeutic use of binaural beats in audio patterns (Atwater, 2004) and bioacoustic – a sound healing technique in alternative medicine that involves the analysis of soundwaves produced during vocalization combined with presentation of low frequency analog sound to promote healing (Klotter, 2004).

Previous studies have shown that listening to sounds or a piece of music allows us to move into a deep sensory state of feeling (Rogers, 1993) as well as replenish brain energy to function more efficiently, reduce stress and increase energy levels (Collins, 2010). The sounds utilized in this present study are the sounds of nature (bird songs, running water, waves) and Quranic recitation.

Sounds of nature were chosen because these sounds stimulate the ear in a way that releases latent energy in the brain. The nervous system can then function more efficiently, reducing stress and increasing energy levels (Collins, 2010).

The Quranic verses were chosen because studies have shown that the Quran promotes healing, removes the causes of tension and cover the soul with tranquility and complacency (Furqan Institute of Quranic Healing, 2010; Haque, 2004; Amir Farid Isahak, 2009). The results of researches conducted over a group of volunteers from USA who were subject to a recitation of the Holy Quran were striking. A trace of a tranquilizing effect was recorded at a

whole rate of 97%. Although many of these volunteers do not know Arabic, yet involuntary physiological changes that led notably to alleviate the acuity of tension they had before were observed in their nervous systems. Furthermore, an experiment of EEG during Quran rehearsal revealed that while listening to Quran, the encephalic waves moved from the fast pattern of vigilance (12-13) wave/ second to the slow pattern (8-18) wave/ second; indicating the state of deep calmness. Non-Arabic speaking persons felt reassured, quiet, and complacent during the process of listening to Quranic verses, in spite of their inability to understand the meanings (Furqan Institute of Quranic Healing, 2010). Allah the Almighty said; "And We send down of the Quran, that which is a healing and a mercy to the believers, and the unbelievers it causes not except loss" (The Quran, Al-Isra', 17: 82).

Recitation of Surah Yasin (Chapter 36) of the Holy Quran was chosen because it is the heart of the Quran. This Surah contains 83 verses. In Sunan Abu Daud, Ibn Abbas narrated that the Prophet Muhammad SAW states, "Everything has a heart and the heart of Quran is (Surah) Yasin. Whoever recites Yasin in the morning, his work for that entire day will be made easy and whoever recites in at the end of the day, his tasks till the next morning will be made easy" (Ibn Qayyim, 2001).

Although there are various relaxation techniques in counseling to reduce stress, there is lack of utilization of sound therapy in the Malaysian context. The aim of this study was to evaluate the efficacy of sound therapy in increasing calmness and reducing stress on working Muslim women in Malaysia.

## **2. Method**

### *2.1 Participants*

Sample comprised of eighty-eight Muslim women; all of them were married and working. Twenty-six hold a certificate or less, thirty-two had bachelor degree and thirty had a master or higher degree. Their age varied from 24 to 50 years old. All participants provided informed consent, were told that their participation in the study was voluntary and participated throughout the study. Data were gathered before and after the participants were given two types of sound therapy interventions, the first being sounds of nature and the second, a recitation of Quranic verse.

### *2.2 Instruments*

Quantitative measure used the Perceived Stress Scale. The Perceived Stress Scale is a 10-item self report questionnaire that measures persons' evaluation of the stressfulness of the situations in the past month of their lives (Cohen & Williamson, 1988). The Perceived Stress Scale measures the degree to which situations in one's life are appraised as stressful. Possible scores (14 items on a 5-point scale) range from 14-70, with higher scores indicating higher levels of perceived stress. Cronbach's  $\alpha$  of 0.78 for internal reliability (Cohen & Williamson, 1988). Qualitative measures include Participant Diaries and a Semi-structured Interview.

### *2.3 Procedure*

Data were collected at two measuring points: at the beginning of the study and three month later upon the completion of the study. Between these two measuring points, the participants participated in a stress management program. In the stress management program, three meetings were aimed at learning about stress and identifying stressors and nine meetings were dedicated to the sound therapy interventions. One hour meetings took place once a week. Participants were exposed to information regarding various types of stressors and potential reactions to these stressors. Sound therapy (comprised of listening to the sounds of nature and a recitation of Quranic verse), a form of relaxation technique, were taught and practiced. Participants were also asked to carry out the interventions taught at home. They were supplied with two CDs, one containing sounds of nature and the other, the Quranic recitation (i.e. Surah Yasin). They were asked to listen to the CDs everyday (at the end of their day) for the duration of two consecutive months. The participants were to listen to the sounds of nature CD during the second month of the program and for the third month, they were to listen to the Quranic recitation CD. After listening, they were to write in the Participant Diaries a summary of their day (what happened during the day) and a reflection of their mood and feelings. At the end of the week, the participants were required to meet at the meeting and discuss about their week with the researcher.

## **3. Results and Discussion**

In order to evaluate the effectiveness of this program, data were collected from eighty-eight Muslim women; all of them were married and working. Analysis of data using t-test and qualitative analysis showed an improvement in

reducing stress and increasing calmness on the participants. Their level of calmness and stress were measured before and after they were given the two types of sound therapy intervention, the first being sounds of nature and the second, a recitation of Quranic verse. The participants reported increased level of calmness and decreased level of stress upon the completion of the program. Both types of sound therapy shows significant increase in participants' calmness and reduction of their stress level but the second type of sound therapy (i.e. recitation of Quranic verse) shows better results than the first type (sounds of nature).

These findings demonstrate that an intervention using sound therapy produces positive effects on the body. The result suggests that the use of sound therapy for working Muslim women in Malaysia may improve their calmness and reduce their stress level. Further research is required to examine the generalizability of the current findings and to investigate the potentiality of using this type of therapy in Malaysia.

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