**Duke** Integrative Medicine Wheel of Health—Professional Care Job Aid

# **Benefits and Potential Risks of Mind and Body Practices**

Use this job aid as a reference when discussing mind and body practices and their potential risks with your client.

### Acupuncture

Acupuncture is the insertion of hair-thin needles into the skin at specific places or channels in order to change the flow of *qi* (pronounced "chee") in the body. According to Traditional Chinese Medicine, each channel links to a specific organ system. The needles are usually kept in the skin for less than half an hour.

There are two main theories as to how it works. Conventional medicine explains that the needles cause the brain and spinal cord to release chemicals that dull pain and boost the immune system. Traditional Chinese Medicine explains that the needles help the body's natural healing abilities by balancing qi.

Some studies suggest that acupuncture can help treat:

- Addiction and depression<sup>1</sup>
- Asthma<sup>2</sup>
- Head, back and neck pain<sup>3,4,5</sup>
- Fibromyalgia<sup>6</sup> and osteoarthritis<sup>7</sup> pain<sup>8,9</sup>
- Morning sickness and other forms of nausea<sup>10</sup>
- Pain from surgery<sup>11</sup>

Acupuncture may also help improve pregnancy rates after in vitro fertilization<sup>12</sup> (IVF).<sup>13</sup>

### What is the potential risk or harm of acupuncture?

Side effects are rare. Providers are required to use sterile needles to prevent infection.

### **Alexander Technique**

The Alexander Technique focuses on muscle control and how the body moves. The goal of the Alexander Technique is to correct body movements that lead to poor posture, body strain and tension. The method is generally taught one-on-one, but group classes may be held as well. During each session, students perform everyday actions (such as walking, standing or sitting). The teacher shows the students how to do those actions so their bodies work better throughout the day.

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Having better posture and movement can ease muscle strain, aches and pains. The Alexander Technique can help you improve your body and physical coordination. By helping to reduce stress, the therapy could help your body resist disease.

Some studies suggest that the Alexander Technique can help treat:

- Back pain<sup>14</sup>
- Depression and other symptoms of Parkinson's disease<sup>15</sup>
- Poor posture in older people<sup>16</sup>

### What is the potential risk or harm of the Alexander Technique?

The Alexander Technique is considered safe for most people. However, talk to your doctor first if you have chronic pain or joint problems.

## **Art Therapy**

Art therapy uses art to help people cope with symptoms of disease, stress and traumatic experiences. In art therapy, you may paint, draw, sculpt or use art media.

Art can provide a creative outlet for both adults and children that many find stress reducing and healing. Art therapists also help people discover connections between their physical health, their emotions and their thoughts. By learning to interpret their own art, clients are better able to appreciate all parts of themselves.

### Some studies suggest that art therapy can help:

- Reduce anxiety and depression in cancer patients<sup>17, 18</sup>
- People cope with physical and emotional trauma<sup>19</sup>
- People cope with addiction and eating disorders<sup>20, 21</sup>
- People cope with dementia<sup>22</sup>
- People cope with learning difficulties<sup>23</sup>
- People cope with schizophrenia<sup>24, 25</sup>

Art therapy can also reduce stress in family caregivers of cancer patients. In addition, this therapy is often used in palliative care and pediatric hospitals.

#### What is the potential risk or harm of art therapy?

Art therapy is considered safe for most people.



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## Biofeedback

Biofeedback involves training the mind to change your body's reactions. Patients are connected to equipment that measures certain body functions such as breath rate and blood pressure. This equipment allows patients to see how their bodies react to their behavior or thought processes. In time, patients can learn to change a reaction and thereby help them relax or reduce symptoms of disease.

By letting patients control their body's reactions, biofeedback can help reduce stress, tension, pain and other symptoms. This therapy also helps patients have a sense of control over their health.

### Some studies suggest that biofeedback can help treat:

- Alcoholism and substance abuse<sup>26</sup>
- Anxiety<sup>27</sup>
- Attention deficit hyperactivity disorder (ADHD)<sup>28</sup>
- Chronic pain and headaches<sup>29, 30</sup>
- Diabetes<sup>31</sup>
- Epilepsy<sup>32</sup>
- High blood pressure (HBP)<sup>33</sup>
- Insomnia<sup>29</sup>
- Motion sickness<sup>34</sup>
- Temporomandibular joint disorder (TMJ)<sup>35</sup>
- Traumatic brain injury<sup>28</sup>

### What is the potential risk or harm of biofeedback?

Biofeedback is considered safe for most people. However, the small amount of electricity used by the equipment might affect a pacemaker.

## Chiropractic

Chiropractic is a type of healthcare that believes most illness comes from problems inside the spinal cord. A chiropractor tries to treat illness by adjusting the spine to allow the nerves to work better. Chiropractors may use other treatment methods as well.

Daniel David Palmer, who developed chiropractic in the 1890s, believed that problems in the spine could keep the body from working well and healing itself. This therapy may cause the body to release chemicals that affect how pain and pleasure are felt.

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Some studies suggest that chiropractic can help treat:

- Back pain<sup>36</sup>
- Headaches<sup>37</sup>
- Neck pain<sup>38</sup>

## What is the potential risk or harm of chiropractic treatment?

Serious side effects are rare. Case reports have linked high-pressure neck adjustments to a certain kind of stroke, but the risk seems to be very small. Chiropractic is not recommended for patients with bone cancer and diseases of the spinal cord and bone marrow.

## **Dance/Movement Therapy**

Dance/movement therapy is based on the idea that your body and mind are connected. Providers work with clients in groups or one-on-one in settings that include hospitals, clinics, wellness centers, schools and nursing homes.

Dance/movement therapy can increase self-esteem and self-confidence in people with body-image problems such as those caused by eating disorders and breast cancer treatment. It can reduce pain related to chronic muscle tension, help you move easier and be more coordinated and help make your heart and lungs stronger. Dance/movement therapy also helps people feel "at home" in their bodies and give them a source of joy.

### Some studies suggest that dance/movement therapy can help treat:

- ADHD<sup>39</sup>
- Autism and other developmental delays or disorders<sup>40, 41</sup>
- Cystic fibrosis<sup>42, 43</sup>
- Dementia<sup>44</sup>
- Depression<sup>45</sup>
- Parkinson's disease<sup>46</sup>
- Schizophrenia<sup>41</sup>

### What is the potential risk or harm of dance/movement therapy?

Dance/movement therapy is considered safe for most people. If you try this kind of therapy, let the provider know about any health problems you have. This will allow the provider to change the therapy based on your needs.

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# Feldenkrais Method®

Developed by Russian-born physicist and athlete Moshe Feldenkrais (1904–1984), this method teaches people to move with more ease and less pain. In group classes, the teacher guides students in simple exercises involving bending, turning and other movements. In private sessions, the teacher provides gentle hands-on lessons based on the individual's needs. Clients remain fully clothed during both group classes and private sessions.

Providers help clients learn about the way they move and try new movements that may be easier. Some people claim that this method can help people who have a hard time moving because of injury, stroke or other conditions. It is also popular with actors, musicians and athletes.

Some studies suggest that the Feldenkrais Method can help treat:

- Anxiety in people with multiple sclerosis<sup>47, 48</sup>
- Balance and mobility problems in older adults<sup>49</sup>
- Lower back, neck and shoulder pain<sup>47, 50</sup>
- Problems with body image in people with eating disorders<sup>51</sup>

#### What is the potential risk or harm of the Feldenkrais Method?

The Feldenkrais Method is considered safe for most people. Speak with your doctor if you have any chronic health problems or if you are recovering from injury or surgery.

### **Guided Imagery**

Guided imagery is a way of using your imagination to improve your health. Imagery involves what you see, hear, smell, taste and feel in your imagination. If you imagine a place that relaxes you, your body will feel more relaxed.

Research shows that imagery can change your heart rate, blood pressure and other actions in your body. Guided imagery can be used for specific health concerns. For instance, people with high blood pressure might imagine their blood flowing through open, relaxed blood vessels. Cancer patients might picture their immune system cells gobbling up cancer cells like Pac-Man.

### Some studies suggest that guided imagery can help treat:

- Asthma<sup>52</sup>
- High blood pressure<sup>53</sup>
- Migraines and tension headaches<sup>54</sup>
- Osteoarthritis pain<sup>55</sup>

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- Poststroke paralysis<sup>56</sup>
- Posttraumatic stress disorder (PTSD)<sup>57</sup>
- Symptoms of Parkinson's disease<sup>58</sup>
- Symptoms related to surgery<sup>59</sup>

## What is the potential risk or harm of guided imagery?

Guided imagery is considered safe for most people.

## **Healing Touch**

Healing Touch (HT) is an energy therapy that is used mostly by nurses. HT providers use light touch near or on the client's clothed body. People often report feeling deeply relaxed during and after a session. HT is used with standard medical care at some hospitals, long-term care facilities and private practices.

By putting the client's energy field in balance, HT providers try to improve the person's well-being and natural ability to heal.

### Some studies suggest that HT can help reduce:

- Anxiety and stress<sup>60</sup>
- Recovery time after surgery<sup>61</sup>
- Fatigue and nausea in cancer patients<sup>62, 63</sup>
- Chronic headaches<sup>64</sup>
- Symptoms of dementia<sup>65</sup>

## What is the potential risk or harm of Healing Touch?

HT is considered safe for most people.

## Hypnosis

Hypnosis involves entering a state of focused attention to promote physical or mental health. A therapist with training in hypnosis may help you to enter this state by having you focus on a small object. Once you are in a state of focused attention, the therapist offers ideas specific to your health concern. Even while hypnotized, you remain in complete control, just as someone who is daydreaming can decide to stop at any point.

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Some scientists believe that hypnosis can cause the brain to release natural painkillers to ease pain. Others believe that hypnosis acts through the unconscious mind and the power of suggestion.

Some studies suggest that hypnosis can help treat or reduce:

- Anxiety and phobias<sup>66</sup>
- Eczema<sup>67, 68</sup>
- Irritable bowel syndrome (IBS)<sup>68</sup>
- Nausea and vomiting due to chemotherapy<sup>69</sup>
- Smoking<sup>68</sup>
- Symptoms of dementia<sup>70</sup>
- Tension headaches<sup>68</sup>

#### What is the potential risk or harm of hypnosis?

Hypnosis is considered safe for most people.

### **Massage Therapy**

Massage therapists rub and knead the body's soft tissues. Several different types of massage have developed over time around the world. These include Swedish massage (the most popular form in the United States), shiatsu (from Japan), Thai massage and tuina (from China). Massages often occur in a warm, comfortable room and last 15 to 90 minutes.

Massage helps your muscles relax, which in turn reduces stress. It is helpful in treating problems made worse by muscle tension, such as headaches, backaches and insomnia. As muscles are rubbed, blood and oxygen start moving through your body more easily. Patients with serious diseases find that massage helps them relax and feel better.

### Some studies suggest that massage therapy can help treat:

- Anxiety and depression<sup>71</sup>
- Back pain<sup>71</sup>
- Knee arthritis<sup>72</sup>
- Migraines<sup>73</sup>
- Neck pain<sup>74</sup>
- Pain from surgery<sup>71, 75</sup>

Interestingly, studies show that premature babies gain weight faster if they are massaged. However, it is unclear why.

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#### What is the potential risk or harm of massage therapy?

Massage should be avoided in the following situations or areas of the body:

- Bone metastases<sup>76</sup>
- Bruised, damaged or infected parts of the body
- Circulatory problems such as phlebitis<sup>77</sup> or varicose veins
- Following surgery, chemotherapy or radiation treatment
- Risk of bleeding or tissue damage
- Tumors

### Meditation

Meditation involves focusing on one thing, like your breath or a repeated word or phrase. Many forms of meditation come from Eastern and Western religions. However, you do not need to be part of these spiritual traditions to try meditation. Meditation helps to clear the mind of anxious thoughts and relax the body. To get the full benefits of meditation, try it once or twice a day for 10–20 minutes.

Meditation can increase activity in the parts of your brain that control good emotions such as happiness. Plus, regular meditation may slow brain decline related to aging. It may also lower blood pressure, relax breathing rates and increase healthy blood flow.

#### Some studies suggest that meditation can help:

- Anxiety and depression<sup>78</sup>
- Arthritis<sup>78</sup>
- ADHD<sup>79</sup>
- Back pain<sup>80</sup>
- Heart disease and high blood pressure<sup>78</sup>
- Hot flashes<sup>81</sup>
- Irritable bowel syndrome<sup>78</sup>
- Premenstrual syndrome<sup>78</sup>

Meditation may help to improve cognitive function and blood pressure.<sup>78</sup> It can boost mood, improve sleep quality and reduce stress in cancer patients.<sup>78</sup>

#### What is the potential risk or harm of meditation?

Meditation is considered safe for most people. However, people at risk of mental illness should talk to a doctor before starting meditation.



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## **Music Therapy**

Throughout history, people around the world have used music in stress reduction and healing. Music therapy may be good for patients of any age, ethnicity, religious background or stage of illness. It may involve listening to music, playing instruments, singing or writing your own songs.

Listening to slow, relaxing music can lower your heart rate, blood pressure and breathing rate. Listening to music with a lively beat can give you energy. Research also suggests that music can affect the hormones in your body. These hormones can reduce pain and stress levels, and can help keep you from getting sick.

### Some studies suggest that music therapy can help treat:

- Anxiety and depression<sup>82</sup>
- Autism<sup>83</sup>
- Chronic pain<sup>84</sup>
- Memory problems in Alzheimer's patients<sup>85</sup>
- Sleep problems<sup>86</sup>
- Symptoms of neurological problems<sup>87</sup>

Music therapy can also help premature infants gain weight.<sup>88</sup> In addition, music therapy is used in some hospices to ease the dying process.<sup>89</sup>

#### What is the potential risk or harm of music therapy?

Music therapy is considered safe for most people.

## Qigong

Qigong (pronounced chee gung) is a physical and mental exercise that combines breathing techniques with simple movements. It is based on traditional Chinese beliefs in qi, the life force. Qigong means "cultivating energy." It resembles tai chi but often consists of shorter sets of movements that are easy to learn.

The traditional Chinese purpose of qigong is to rebalance the inner qi. This calms the mind and energizes the body and all of its systems. In Chinese medicine, qi is believed to affect blood flow, the lymph and nervous systems, blood pressure, heart rate and stress levels.

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Some studies suggest that gigong can help:

- Encourage sleep and relaxation<sup>90</sup>
- Reduce anxiety, stress and depression<sup>91, 92, 93</sup>
- Improve balance and reduce the number of falls<sup>94, 95</sup>
- Lower blood pressure<sup>96</sup>
- Treat asthma<sup>97</sup>
- Treat arthritis<sup>98</sup>
- Improve movement problems in people with Parkinson's disease<sup>99</sup>

### What is the potential risk or harm of gigong?

Qigong exercises do not challenge strength or stamina and can even be used by people in wheelchairs and individuals with frail bones. Qigong is considered safe for most people.

### Reiki

Reiki (pronounced ray-key) is a spiritual healing practice that seeks to restore balance. Providers place their hands lightly on the patient's body to send subtle energy to the patient. The patient remains fully clothed and often lies on a padded table. Patients typically feel very relaxed and peaceful and sometimes fall asleep. Some people may sense a feeling of heat or coolness or very subtle pleasant waves.

It is believed that Reiki increases levels of peace, balance and relaxation. Reiki healing is understood to be drawn through the provider in a way that is based on the recipient's need. In this way, it is the recipient, not the provider, who controls what is happening on a subtle level.

#### Some studies suggest that Reiki can help reduce:

- Behavioral and memory problems in people with mild Alzheimer's disease<sup>100</sup>
- Pain and anxiety<sup>101, 102</sup>
- Symptoms of depression<sup>103</sup>

### What is the potential risk or harm of Reiki?

Reiki is considered safe for most people.

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## Tai Chi

Tai chi (pronounced "tie-chee") is an ancient Chinese martial art based on the philosophy of Taoism. Its movements are gentle and well suited for those who are not physically strong, healthy or flexible. Deliberate movements are combined with meditation and controlled breathing.

Tai chi improves health through exercise, which helps you relax and reduce stress. According to Traditional Chinese Medicine, tai chi exercises also balance qi. Tai chi is thought to improve concentration, energy, posture and circulation. It can also give you an increased sense of well-being. Tai chi is best regarded as a lifelong preventive strategy to keep you healthy.

### Some studies suggest that tai chi can help:

- Lessen arthritis pain and disability<sup>104</sup>
- Lower blood pressure<sup>105</sup>
- Improve heart and lung functions<sup>106</sup>
- Increase balance and flexibility<sup>107</sup>
- Lower the risk of falls in older people<sup>106</sup>
- Maintain bone density in postmenopausal women<sup>108</sup>
- Improve sleep in seniors<sup>107</sup>

## What is the potential risk or harm of tai chi?

As with any fitness program, you could get sore muscles or even sprains if you exercise too much. But in general, these exercises are considered safe for most people.

## Therapeutic Touch®

Therapeutic Touch (TT) is based on the idea that a life force within and around the body is essential to good health. Most often practiced by nurses, TT involves sweeping the hands down the patient's body to smooth energy fields and remove blockages in the patient's vital energy. Sessions typically last about 30 minutes. Despite what the name implies, TT does not call for actually touching the patient's body.

Some people believe that TT removes blockages and harmful energy in the patient's energy fields. Patients have reported that they feel more relaxed, feel less stressed and have less pain after TT treatments.

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Some studies suggest that TT can help:

- Treat burns and other wounds<sup>109, 110</sup>
- Relieve osteoarthritis pain<sup>111</sup>
- Relieve tension headaches<sup>112</sup>
- Lower anxiety<sup>113</sup>
- Relieve symptoms of dementia<sup>114</sup>
- Promote well-being in cancer patients<sup>115</sup>

## What is the potential risk or harm of Therapeutic Touch?

TT is considered safe for most people.

## Yoga

Yoga exercises help the body and mind work together. Yoga is often done in group classes. There are three main parts: breathing exercises, body poses and meditation. Through a series of positions, all the muscle groups in the body can be strengthened and stretched. Through breathing exercises and meditation, yoga poses seek to bring balance between the body and the mind.

Yoga connects the mind, body and spirit together. Yoga has been defined as a system of personal development. When practiced regularly, it can help you relax, reduce stress, strengthen your body and improve flexibility.

### Some studies suggest that yoga can help treat:

- Anxiety, depression and insomnia<sup>116, 117</sup>
- Arthritis<sup>118, 119</sup>
- Carpal tunnel syndrome<sup>120</sup>
- Chronic low back pain<sup>116</sup>
- Diabetes<sup>116</sup>
- High blood pressure<sup>116</sup>
- Symptoms of menopause<sup>117</sup>

Yoga has been shown to improve sleep, mood and overall quality of life in cancer patients. It has also been found to reduce the risk of falls by older people<sup>121</sup>, and to improve lung function in people with asthma.



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#### What is the potential risk or harm of yoga?

As with any exercise program, people under medical care should consult their doctors to be sure that yoga is appropriate. Since yoga involves moving your body, you need to be careful about pushing yourself too hard. Some poses can cause problems if done too hard or for too long. Tell your yoga teacher about any health problems, including joint problems, high blood pressure and glaucoma. Your teacher will show you which positions to avoid or change.

### References

- 1. Courbasson, C. M., de Sorkin, A. A., Dullerud, B., & Van Wyk, L. (2007). Acupuncture treatment for women with concurrent substance use and anxiety/depression: An effective alternative therapy? *Family & Community Health, 30*(2), 112-120.
- Maa, S. H., Sun, M. F., Hsu, K. H., Hung, T. J., Chen, H. C., Yu, C. T., ... Lin, H. C. (2003). Effect of acupuncture or acupressure on quality of life of patients with chronic obstructive asthma: A pilot study. *The Journal of Alternative & Complementary Medicine*, 9(5), 659-670.
- Melchart, D., Streng, A., Hoppe, A., Brinkhaus, B., Witt, C., Wagenpfeil, S., ... Linde, K. (2005). Acupuncture in patients with tension-type headache: Randomised controlled trial. *British Medical Journal*, 331(7513), 376.
- 4. Brinkhaus, B., Witt, C. M., Jena, S., Linde, K., Streng, A., Wagenpfeil, S., ... Willich, S. N. (2006). Acupuncture in patients with chronic low back pain: A randomized controlled trial. *Archives of Internal Medicine*, *166*(4), 450-457.
- 5. Witt, C. M., Jena, S., Brinkhaus, B., Liecker, B., Wegscheider, K., & Willich, S. N. (2006). Acupuncture for patients with chronic neck pain. *Pain*, *125*(1), 98-106.
- 6. Fibromyalgia. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/fibromyalgia
- 7. Osteoarthritis. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/osteoarthritis
- Targino, R. A., Imamura, M., Kaziyama, H. H., Souza, L. P., Hsing, W. T., Furlan, A. D., ... Neto, R. S. A. (2008). A randomized controlled trial of acupuncture added to usual treatment for fibromyalgia. *Journal of Rehabilitation Medicine*, *40*(7), 582-588.
- 9. Zaslawski, C. (2007). Acupuncture for Osteoarthritis. *Australian Journal of Acupuncture and Chinese Medicine*, 2(1), 38.
- Ezzo, J., Streitberger, K., & Schneider, A. (2006). Cochrane systematic reviews examine P6 acupuncture-point stimulation for nausea and vomiting. *Journal of Alternative & Complementary Medicine*, 12(5), 489-495.
- Kotani, N., Hashimoto, H., Sato, Y., Sessler, D. I., Yoshioka, H., Kitayama, M., ... Matsuki, A. (2001). Preoperative intradermal acupuncture reduces postoperative pain, nausea and vomiting, analgesic requirement, and sympathoadrenal responses. *Anesthesiology*, *95*(2), 349-356.
- 12. In vitro fertilization. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/dictionary/hdl
- 13. Dieterle, S., Ying, G., Hatzmann, W., & Neuer, A. (2006). Effect of acupuncture on the outcome of in vitro fertilization and intracytoplasmic sperm injection: A randomized, prospective, controlled clinical study. *Fertility and Sterility*, *85*(5), 1347-1351.

- Hollinghurst, S., Sharp, D., Ballard, K., Barnett, J., Beattie, A., Evans, M., . . . Little, P. (2008). Randomised controlled trial of Alexander technique lessons, exercise, and massage (ATEAM) for chronic and recurrent back pain: Economic evaluation. *British Medical Journal, 337.* doi: 10.1136/bmj.a2656
- 15. Stallibrass, C. (1997). An evaluation of the Alexander Technique for the management of disability in Parkinson's disease-a preliminary study. *Clinical Rehabilitation, 11*(1), 8-12.
- 16. Dennis, R. J. (1999). Functional reach improvement in normal older women after Alexander Technique instruction. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *54*(1), M8-M11.
- Monti, D. A., Peterson, C., Kunkel, E. J. S., Hauck, W. W., Pequignot, E., Rhodes, L., Brainard, G. C. (2006). A randomized, controlled trial of mindfulness-based art therapy (MBAT) for women with cancer. *Psycho-Oncology*, *15*(5), 363-373.
- Bar-Sela, G., Atid, L., Danos, S., Gabay, N., & Epelbaum, R. (2007). Art therapy improved depression and influenced fatigue levels in cancer patients on chemotherapy. *Psycho-Oncology*, *16*(11), 980-984.
- 19. Appleton, V. (2001). Avenues of hope: Art therapy and the resolution of trauma. Art Therapy, 18(1), 6-13.
- 20. Frisch, M. J., Franko, D. L., & Herzog, D. B. (2006). Arts-based therapies in the treatment of eating disorders. *Eating Disorders*, *14*(2), 131-142.
- 21. Feen-CallIgan, H. (1995). The use of art therapy in treatment programs to promote spiritual recovery from addiction. *Art Therapy, 12*(1), 46-50.
- 22. Stewart, E. G. (2004). Art therapy and neuroscience blend: Working with patients who have dementia. *Art Therapy*, *21*(3), 148-155.
- 23. Freilich, R., & Shechtman, Z. (2010). The contribution of art therapy to the social, emotional, and academic adjustment of children with learning disabilities. *The Arts in Psychotherapy*, 37(2), 97-105.
- 24. Lukoff, D., Wallace, C. J., Liberman, R. P., & Burke, K. (1986). A holistic program for chronic schizophrenic patients. *Schizophrenia Bulletin, 12*(2), 274.
- 25. Schizophrenia. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/dictionary/schizophrenia
- 26. Carter, T. M. (1998). The effect of spiritual practices on recovery from substance abuse. *Journal* of *Psychiatric and Mental Health Nursing, 5*, 409-414.
- Barlow, D. H., Cohen, A. S., Waddell, M. T., Vermilyea, B. B., Klosko, J. S., Blanchard, E. B., & Di Nardo, P. A. (1984). Panic and generalized anxiety disorders: Nature and treatment. *Behavior Therapy*, 15(5), 431-449.
- 28. Tinius, T. P., & Tinius, K. A. (2000). Changes after EEG biofeedback and cognitive retraining in adults with mild traumatic brain injury and attention deficit hyperactivity disorder. *Journal of Neurotherapy, 4*(2), 27-44.
- 29. US National Institutes of Health. (1995). Integration of behavioral and relaxation approaches into the treatment of chronic pain and insomnia. Retrieved from http://consensus.nih.gov/1995/1995behaviorrelaxpaininsomniata017html.htm
- 30. Blanchard, E. B., Appelbaum, K. A., Guarnieri, P., Morrill, B., & Dentinger, M. P. (1987). Five year prospective follow-up on the treatment of chronic headache with biofeedback and/or relaxation. *Headache: The Journal of Head and Face Pain, 27*(10), 580-583.
- 31. Surwit, R. S., & Schneider, M. S. (1993). Role of stress in the etiology and treatment of diabetes mellitus. *Psychosomatic Medicine*, *55*(4), 380-393.

- 32. Lubar, J. F., & Bahler, W. W. (1976). Behavioral management of epileptic seizures following EEG biofeedback training of the sensorimotor rhythm. *Biofeedback and Self-regulation, 1*(1), 77-104.
- 33. Glasgow, M. S., Gaarder, K. R., & Engel, B. T. (1982). Behavioral treatment of high blood pressure II. Acute and sustained effects of relaxation and systolic blood pressure biofeedback. *Psychosomatic Medicine*, *44*(2), 155-170.
- 34. Jones, D. R., Levy, R. A., Gardner, L., Marsh, R. W., & Patterson, J. C. (1985). Self-control of psychophysiologic response to motion stress: Using biofeedback to treat airsickness. *Aviation, Space, and Environmental Medicine, 56*(12), 1152-1157.
- 35. Turk, D. C., Zaki, H. S., & Rudy, T. E. (1993). Effects of intraoral appliance and biofeedback/stress management alone and in combination in treating pain and depression in patients with temporomandibular disorders. *The Journal of Prosthetic Dentistry*, *70*(2), 158-164.
- Senna, M. K., & Machaly, S. A. (2011). Does maintained spinal manipulation therapy for chronic nonspecific low back pain result in better long-term outcome? *Spine, 36*(18), 1427-1437. doi: 1410.1097/BRS.1420b1013e3181f1425dfe1420.
- 37. Tuchin, P.J., Pollard, H., & Bonello, R. (2000). A randomized controlled trial of chiropractic spinal manipulative therapy for migraine. *Journal of Manipulative and Physiological Therapeutics*, *23*(2), 91-95.
- Hurwitz, E. L., Carragee, E. J., van der Velde, G., Carroll, L. J., Nordin, M., Guzman, J., ... Haldeman, S. (2009). Treatment of neck pain: Noninvasive interventions: Results of the Bone and Joint Decade 2000–2010 Task Force on Neck Pain and Its Associated Disorders. *Journal of Manipulative and Physiological Therapeutics*, 32(2), S141-S175.
- 39. Grönlund, E., Renck, B., & Weibull, J. (2005). Dance/movement therapy as an alternative treatment for young boys diagnosed as ADHD: A pilot study. *American Journal of Dance Therapy*, *27*(2), 63-85.
- 40. Archambeau, M. K., & Szymanski, D. J. (1977). Dance therapy and the autistic child. *Journal of Physical Education and Recreation, 48*(7), 54-55.
- 41. Zagelbaum, V. N., & Rubino, M. A. (1991). Combined dance/movement, art, and music therapies with a developmentally delayed, psychiatric client in a day treatment setting. *The Arts in Psychotherapy*, *18*(2), 139-148.
- 42. Cystic fibrosis. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/cystic%20fibrosis
- 43. Goodill, S. W. (2004). Dance/movement therapy for adults with cystic fibrosis: Pilot data on mood and adherence. *Alternative Therapies in Health and Medicine, 11*(1), 76-77.
- 44. Palo-Bengtsson, L., Winblad, B., & Ekman, S. L. (1998). Social dancing: A way to support intellectual, emotional and motor functions in persons with dementia. *Journal of Psychiatric and Mental Health Nursing, 5*(6), 545-554.
- 45. Jeong, Y. J., Hong, S. C., Lee, M. S., Park, M. C., Kim, Y. K., & Suh, C. M. (2005). Dance movement therapy improves emotional responses and modulates neurohormones in adolescents with mild depression. *International Journal of Neuroscience*, *115*(12), 1711-1720.
- 46. Westbrook, B. K., & McKibben, H. (1989). Dance/movement therapy with groups of outpatients with Parkinson's disease. *American Journal of Dance Therapy*, *11*(1), 27-38.
- The Duke Center for Integrative Medicine, Liebowitz, R., Smith, L., & Gaudet, T. (2006). Feldenkrais Method. *The Duke Encyclopedia of New Medicine: Conventional and Alternative Medicine for All Ages* (pp. 494-495). London: Rodale International Ltd.
- 48. Multiple sclerosis. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/multiple%20sclerosis

- 49. Ullmann, G., Williams, H. G., Hussey, J., Durstine, J. L., & McClenaghan, B. A. (2010). Effects of Feldenkrais exercises on balance, mobility, balance confidence, and gait performance in community-dwelling adults age 65 and older. *The Journal of Alternative and Complementary Medicine*, *16*(1), 97–105.
- 50. Plastaras, C. T., Schran, S., Kim, N., Sorosky, S., Darr, D., Chen, M. S., & Lansky, R. (2011). Complementary and alternative treatment for neck pain: Chiropractic, acupuncture, TENS, massage, yoga, Tai Chi, and Feldenkrais. *Physical Medicine and Rehabilitation Clinics of North America*, 22(3), 521-537.
- 51. Hutchinson, M. G. (1994). Imagining ourselves whole: A feminist approach to treating body image disorders. In P. Fallon, M. A. Katzman, & S. C. Wooley (Eds.), *Feminist Perspectives on Eating Disorders* (152-168). New York, NY: The Guilford Press.
- 52. Lahmann, C., Nickel, M., Schuster, T., Sauer, N., Ronel, J., Noll-Hussong, M., ... Loew, T. (2009). Functional relaxation and guided imagery as complementary therapy in asthma: A randomized controlled clinical trial. *Psychotherapy and Psychosomatics*, *78*(4), 233-239.
- 53. Yung, P., French, P., & Leung, B. (2001). Relaxation training as complementary therapy for mild hypertension control and the implications of evidence-based medicine. *Complementary Therapies in Nursing and Midwifery, 7*(2), 59-65.
- 54. Mannix, L. K., Chandurkar, R. S., Rybicki, L. A., Tusek, D. L., & Solomon, G. D. (1999). Effect of guided imagery on quality of life for patients with chronic tension-type headache. *Headache: The Journal of Head and Face Pain, 39*(5), 326-334.
- 55. Baird, C. L., & Sands, L. (2004). A pilot study of the effectiveness of guided imagery with progressive muscle relaxation to reduce chronic pain and mobility difficulties of osteoarthritis. *Pain Management Nursing, 5*(3), 97-104.
- 56. Manganiello, A. J. (1986). Hypnotherapy in the rehabilitation of a stroke victim: A case study. *American Journal of Clinical Hypnosis, 29*(1), 64-68.
- 57. Blake, R. L., & Bishop, S. R. (1994). The Bonny Method of Guided Imagery and Music (GIM) in the treatment of post-traumatic stress disorder (PTSD) with adults in the psychiatric setting. *Music Therapy Perspectives, 12*(2), 125-129.
- 58. Schlesinger, I., Benyakov, O., Erikh, I., Suraiya, S., & Schiller, Y. (2009). Parkinson's disease tremor is diminished with relaxation guided imagery. *Movement Disorders, 24*(14), 2059-2062.
- 59. Holden-lund, C. (1988). Effects of relaxation with guided imagery on surgical stress and wound healing. *Research in Nursing & Health, 11*(4), 235-244.
- 60. Maville, J. A., Bowen, J. E., & Benham, G. (2008). Effect of healing touch on stress perception and biological correlates. *Holistic Nursing Practice*, 22(2), 103-110.
- 61. MacIntyre, B., Hamilton, J., Fricke, T., Ma, W., Mehie, S., & Michel, M. (2008). The efficacy of healing touch in coronary artery bypass surgery recovery: A randomized clinical trial. *Alternative Therapies in Health & Medicine, 14*(4).
- 62. Aghabati, N., Mohammadi, E., & Pour Esmaiel, Z. (2010). The effect of therapeutic touch on pain and fatigue of cancer patients undergoing chemotherapy. *Evidence-Based Complementary and Alternative Medicine*, *7*(3), 375-381.
- 63. Grealish, L., Lomasney, A., & Whiteman, B. (2000). Foot massage: A nursing intervention to modify the distressing symptoms of pain and nausea in patients hospitalized with cancer. *Cancer Nursing*, *23*(3), 237-243.
- 64. Kiley, S. (2009). The evaluation of Healing Touch for headache patients. *The Journal of Alternative and Complementary Medicine*, *15*(8) 819-826.
- 65. Wang, K. L., & Hermann, C. (2006). Pilot study to test the effectiveness of healing touch on agitation in people with dementia. *Geriatric Nursing*, *27*(1), 34-40.
- 66. Clarke, J. C., & Jackson, J. A. (1983). Hypnosis and Behavior Therapy: The Treatment of Anxiety and Phobias. New York, NY: Springer.

- 67. Eczema. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/eczema
- 68. The Duke Center for Integrative Medicine, Liebowitz, R., Smith, L., & Gaudet, T. (2006). Hypnotherapy. *The Duke Encyclopedia of New Medicine: Conventional and Alternative Medicine for All Ages* (pp. 508-511). London: Rodale International Ltd.117.
- 69. Marchioro, G., Azzarello, G., Viviani, F., Barbato, F., Pavanetto, M., Rosetti, F., ... Vinante, O. (2000). Hypnosis in the treatment of anticipatory nausea and vomiting in patients receiving cancer chemotherapy. *Oncology*, *59*(2), 100-104.
- 70. Duff, S., & Nightingale, D. (2007). Alternative approaches to supporting individuals with dementia: Enhancing quality of life through hypnosis. *Alzheimer's Care Today, 8*(4), 321-331.
- 71. The Duke Center for Integrative Medicine, Liebowitz, R., Smith, L., & Gaudet, T. (2006). Massage. *The Duke Encyclopedia of New Medicine: Conventional and Alternative Medicine for All Ages* (pp. 468-473). *London: Rodale International Ltd*.
- 72. Perlman, A. I., Sabina, A., Williams, A. L., Njike, V. Y., & Katz, D. L. (2006). Massage therapy for osteoarthritis of the knee: A randomized controlled trial. *Archives of Internal Medicine*, *166*(22), 2533-2538.
- 73. Lawler, S. P., & Cameron, L. D. (2006). A randomized, controlled trial of massage therapy as a treatment for migraine. *Annals of Behavioral Medicine, 32*(1), 50-59.
- 74. Sherman, K. J., Cherkin, D. C., Hawkes, R. J., Miglioretti, D. L., & Deyo, R. A. (2009). Randomized trial of therapeutic massage for chronic neck pain. *The Clinical Journal of Pain*, 25(3), 233.
- 75. Bauer, B. A., Cutshall, S. M., Wentworth, L. J., Engen, D., Messner, P. K., Wood, C. M., ... Sundt III, T. M. (2010). Effect of massage therapy on pain, anxiety, and tension after cardiac surgery: A randomized study. *Complementary Therapies in Clinical Practice*, *16*(2), 70-75.
- 76. Metastases. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/metastases
- 77. Phlebitis. (n.d.). In *Merriam-Webster's* online dictionary. Retrieved from http://www.merriam-webster.com/medical/phlebitis
- 78. The Duke Center for Integrative Medicine, Liebowitz, R., Smith, L., & Gaudet, T. (2006). Meditation. *The Duke Encyclopedia of New Medicine: Conventional and Alternative Medicine for All Ages* (pp. 514-519). *London: Rodale International Ltd.*
- 79. Zylowska, L., Ackerman, D. L., Yang, M. H., Futrell, J. L., Horton, N. L., Hale, T. S., ... Smalley, S. L. (2008). Mindfulness meditation training in adults and adolescents with ADHD: A feasibility study. *Journal of Attention Disorders*, *11*(6), 737-746.
- Morone, N. E., Greco, C. M., & Weiner, D. K. (2008). Mindfulness meditation for the treatment of chronic low back pain in older adults: A randomized controlled pilot study. *Pain, 134*(3), 310-319.
- 81. Wijma, K., Melin, A., Nedstrand, E., & Hammar, M. (1997). Treatment of menopausal symptoms with applied relaxation: A pilot study. *Journal of Behavior Therapy and Experimental Psychiatry*, *28*(4), 251-261.
- Buetin, S., Portet, F., Picot, M. C., Pommié, C., Messaoudi, M., Djabelkir, L., ... Touchon, J. (2009). Effect of music therapy on anxiety and depression in patients with Alzheimer's type dementia: Randomised, controlled study. *Dementia and Geriatric Cognitive Disorders, 28*(1), 36-46.
- Kim, J., Wigram, T., & Gold, C. (2009). Emotional, motivational and interpersonal responsiveness of children with autism in improvisational music therapy. *Autism*, 13(4), 389-409.

- 84. Guétin, S., Coudeyre, E., Picot, M. C., Ginies, P., Graber-Duvernay, B., Ratsimba, D., ... Hérisson, C. (2005). Effect of music therapy among hospitalized patients with chronic low back pain: A controlled, randomized trial. In Annales de réadaptation et de médecine physique: revue scientifique de la Société française de rééducation fonctionnelle de réadaptation et de médecine physique, 48(5), 217-224.
- 85. Prickett, C. A., & Moore, R. S. (1991). The use of music to aid memory of Alzheimer's patients. *Journal of Music Therapy*, 28(2), 101-110.
- 86. Harmat, L., Takacs, J., & Bodizs, R. (2008). Music improves sleep quality in students. *Journal of Advanced Nursing*, *62*(3), 327-335.
- 87. Tomaino, C. M. (2009). Clinical applications of music therapy in neurologic rehabilitation. In R. Hass & V. Brandes (Eds.), *Music That Works* (pp. 211-220). Vienna: Springer.
- 88. Loewy, J., Stewart, K., Dassler, A. M., Telsey, A., & Homel, P. (2013). The effects of music therapy on vital signs, feeding, and sleep in premature infants. *Pediatrics*, *131*(5), 902-918.
- 89. Hilliard, R. E. (2005). Music therapy in hospice and palliative care: A review of the empirical data. *Evidence-Based Complementary and Alternative Medicine*, *2*(2), 173-178.
- Manzaneque, J. M., Vera, F. M., Rodriguez, F. M., Garcia, G. J., Leyva, L., & Blanca, M. J. (2009). Serum Cytokines, Mood and Sleep after a Qigong Program Is Qigong an Effective Psychobiological Tool? *Journal of Health Psychology*, *14*(1), 60-67.
- 91. Johansson, M., Hassmen, P., & Jouper, J. (2011). Acute effects of qigong exercise on mood and anxiety. *Sport, Exercise, and Performance Psychology, 1,* 60-65.
- 92. Griffith, J. M., Hasley, J. P., Liu, H., Severn, D. G., Conner, L. H., & Adler, L. E. (2008). Qigong stress reduction in hospital staff. *The Journal of Alternative and Complementary Medicine*, 14(8), 939-945.
- Tsang, H. W., Fung, K. M., Chan, A. S., Lee, G., & Chan, F. (2006). Effect of a qigong exercise programme on elderly with depression. *International Journal of Geriatric Psychiatry*, 21(9), 890-8.
- 94. Rogers, C. E., Larkey, L. K., & Keller, C. (2009). A review of clinical trials of tai chi and qigong in older adults. *Western Journal of Nursing Research*, *31*(2), 245-279.
- 95. Jahnke, R., Larkey, L., Rogers, C., Etnier, J., & Lin, F. (2010). A comprehensive review of health benefits of qigong and tai chi. *American Journal of Health Promotion, 24*(6), e1-e25.
- 96. Lee, M. S., Lee, M. S., Choi, E. S., & Chung, H. T. (2003). Effects of Qigong on blood pressure, blood pressure determinants and ventilatory function in middle-aged patients with essential hypertension. *The American Journal of Chinese Medicine*, *31*(03), 489-497.
- 97. Birdee, G.S., Wayne, P.M., Davis, R.B., Phillips, R.S., & Yeh, G.Y. (2009). T'ai chi and qigong for health: Patterns of use in the United States. *The Journal of Alternative and Complementary Medicine*, *15*(9), 969-973.
- 98. Lee, H. J., Park, H. J., Chae, Y., Kim, S. Y., Kim, S. N., Kim, S. T., ... & Lee, H. (2009). Tai Chi Qigong for the quality of life of patients with knee osteoarthritis: A pilot, randomized, waiting list controlled trial. *Clinical Rehabilitation*, 23(6), 504-511.
- 99. Schmitz-Hübsch, T., Pyfer, D., Kielwein, K., Fimmers, R., Klockgether, T., & Wüllner, U. (2006). Qigong exercise for the symptoms of Parkinson's disease: A randomized, controlled pilot study. *Movement Disorders, 21*(4), 543-548.
- 100. Crawford, S. E., Leaver, V. W., & Mahoney, S. D. (2006). Using Reiki to decrease memory and behavior problems in mild cognitive impairment and mild Alzheimer's disease. *Journal of Alternative & Complementary Medicine, 12*(9), 911-913.
- 101. Vitale, A. T., & O'Connor, P. C. (2006). The effect of Reiki on pain and anxiety in women with abdominal hysterectomies: A quasi-experimental pilot study. *Holistic Nursing Practice, 20*(6), 263-272.

- 102. Birocco, N., Guillame, C., Storto, S., Ritorto, G., Catino, C., Gir, N., ... Ciuffreda, L. (2012). The effects of Reiki therapy on pain and anxiety in patients attending a day oncology and infusion services unit. *American Journal of Hospice and Palliative Medicine*, *29*(4), 290-294.
- 103. The Duke Center for Integrative Medicine, Liebowitz, R., Smith, L., & Gaudet, T. (2006). Reiki. *The Duke Encyclopedia of New Medicine: Conventional and Alternative Medicine for All Ages* (p. 571). *London: Rodale International Ltd.*
- 104. Wang, C., Schmid, C. H., Hibberd, P. L., Kalish, R., Roubenoff, R., Rones, R., & McAlindon, T. (2009). Tai Chi is effective in treating knee osteoarthritis: A randomized controlled trial. *Arthritis Care & Research*, 61(11), 1545-1553.
- 105. Yeh, G. Y., Wang, C., Wayne, P. M., & Phillips, R. S. (2008). The effect of tai chi exercise on blood pressure: A systematic review. *Preventive Cardiology*, *11*(2), 82-89.
- 106.Li, J. X., Hong, Y., & Chan, K.M. (2001). Tai chi: Physiological characteristics and beneficial effects on health. *British Journal of Sports Medicine*, *35*(3), 148-156.
- 107.Li, F., Fisher, K. J., Harmer, P., Irbe, D., Tearse, R. G., & Weimer, C. (2004). Tai Chi and Self-Rated Quality of Sleep and Daytime Sleepiness in Older Adults: A Randomized Controlled Trial. Journal of the American Geriatrics Society, 52(6), 892-900.,
- 108. Chan, K., Qin, L., Lau, M., Woo, J., Au, S., Choy, W., ... Lee, S. (2004). A randomized, prospective study of the effects of Tai Chi Chun exercise on bone mineral density in postmenopausal women. *Archives of Physical Medicine and Rehabilitation*, *85*(5), 717-722.
- 109. Turner, J. G., Clark, A. J., Gauthier, D. K., & Williams, M. (1998). The effect of therapeutic touch on pain and anxiety in burn patients. *Journal of Advanced Nursing*, *28*(1), 10-20.
- 110. Wirth, D. P., Richardson, J. T., Eidelman, W. S., & O'Malley, A. C. (1993). Full thickness dermal wounds treated with non-contact therapeutic touch: A replication and extension. *Complementary Therapies in Medicine*, *1*(3), 127-132.
- 111. Gordon, A., Merenstein, J. H., D'Amico, F., & Hudgens, D. (1998). The effects of therapeutic touch on patients with osteoarthritis of the knee. *The Journal of Family Practice, 47*(2), 271-277.
- 112. Keller, E., & Bzdek, V. M. (1986). Effects of therapeutic touch on tension headache pain. *Nursing Research*, *35*(2), 101-105.
- 113. Heidt, P. (1981). Effect of therapeutic touch on anxiety level of hospitalized patients. *Nursing Research, 30*(1), 32-37.
- 114. Woods, D. L., Craven, R. F., & Whitney, J. (2005). The effect of therapeutic touch on behavioral symptoms of persons with dementia. *Alternative Therapies in Health & Medicine, 11*(1), 66-74.
- 115. Giasson, M., & Bouchard, L. (1998). Effect of therapeutic touch on the well-being of persons with terminal cancer. *Journal of Holistic Nursing, 16*(3), 383-398.
- 116. The Duke Center for Integrative Medicine, Liebowitz, R., Smith, L., & Gaudet, T. (2006). Yoga. *The Duke Encyclopedia of New Medicine: Conventional and Alternative Medicine for All Ages* (pp. 476-479). *London: Rodale International Ltd.*
- 117. Afonso, R. F., Hachul, H., Kozasa, E. H., de Souza Oliveira, D., Goto, V., Rodrigues, D., ... Leite, J. R. (2012). Yoga decreases insomnia in postmenopausal women: A randomized clinical trial. *Menopause*, *19*(2), 186-193.
- 118. Kolasinski, S. L., Garfinkel, M., Tsai, A. G., Matz, W., Dyke, A. V., & Schumacher, H. R., Jr. (2005). Iyengar yoga for treating symptoms of osteoarthritis of the knees: A pilot study. *Journal of Alternative & Complementary Medicine*, *11*(4), 689-693.
- 119. Badsha, H., Chhabra, V., Leibman, C., Mofti, A., & Kong, K. O. (2009). The benefits of yoga for rheumatoid arthritis: Results of a preliminary, structured 8-week program. *Rheumatology international, 29*(12), 1417-1421.
- 120. Garfinkel, M. S., Singhal, A., Katz, W. A., Allan, D. A., Reshetar, R., & Schumacher, H. R., Jr. (1998). Yoga-based intervention for carpal tunnel syndrome: A randomized trial. *The Journal of the American Medical Association, 280*(18), 1601-1603.

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121. Schmid, A. A., Van Puymbroeck, M., & Koceja, D. M. (2010). Effect of a 12-week yoga intervention on fear of falling and balance in older adults: A pilot study. *Archives of Physical Medicine and Rehabilitation*, *91*(4), 576-583.