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Physical therapists who have incorporated yoga into their practices discuss how and why they did it. They also explain how other PTs can benefit from knowledge of yoga, and how it may help their patients and clients.

By Michele Wojciechowski

If the word "yoga" conjures up for you images of slender women dressed in spandex twisting themselves into pretzels, or rooms full of people chanting and burning incense, think again.

Physical therapists (PTs) throughout the country are implementing yoga into their practices. They're helping patients of all ages—from youth to the elderly—improve their bodies and their overall health. Evidence-based research indicates that yoga can and does make a significant difference. (See "Evidence-based Research.")

So what is yoga? "The term yoga is derived from the Sanskrit verb 'yuj,' meaning to yoke or unite, as in uniting the body, mind, and spirit," writes Matt Taylor, PT, PhD, RYT, in "Yoga Therapeutics: An Ancient Practice in a 21st Century Setting" (from the book by Carol Davis Complementary Therapies in Rehabilitation: Evidence for Efficacy in Therapy, Prevention, and Wellness). "This union is achieved through various methods and technologies that include the familiar postures. A complete classic yoga practice has eight components that equate to moral restraints, personal behavioral observances, postures, regulation of breath, drawing the senses inward, concentration, and meditation. Over time, this complete yoga practice results in increased strength, balance, stamina, flexibility, and relaxation," Taylor writes.

Taylor has 25 years of clinical experience in both orthopedic and sports physical therapy. He is an Army-trained physical therapist, having served as a PT and active duty Army Medical Specialist officer.



Taylor himself began using yoga because of a back problem. After going to many health care professionals with limited success, he tried yoga. At the time, he owned a private practice with an integrated health club. A patient encouraged Taylor to have a local yoga teacher offer a class at the health club. Taylor did. He then began attending the classes out of curiosity. Within two months, he reports, his back problem was gone.

"Contributing to my back problems was that I was running around trying to control every single thing in my life. That mindset generated the physical tension, which created the immobility to compress the disk, which caused the disk to herniate," explains Taylor. "And what yoga taught me was to sense and be aware of my body's responses to my thinking or the mind/body connection. Not in some mystical, esoteric vein, but very much along the lines of cognitive mindfulness-based stress reduction."

Taylor, a member of APTA's private practice and orthopaedic sections, also is the president of the International Association of Yoga Therapists, trained in yoga therapy. He founded a company to

travel throughout the country and teach the benefits of yoga postures to PTs and occupational therapists (OTs).

"Yoga slows people down and asks them to look, observe, and see how their movements are related to what they're thinking and feeling and vice versa. It's the mind-body connection," says Taylor.

In 2004, Taylor opened Dynamic Systems Rehabilitation Clinic in Scottsdale, Arizona. In it, he and other physical therapists incorporate yoga with physical therapy. For example, Taylor says, "I do an evaluation in which I watch patients move, climb, stand, or whatever their functional issues are. But I also assess how they're breathing. I let them feel how they're breathing in their chests and not using their diaphragm, which is typical of 90% of the population. We begin there because moving the diaphragm generates the relaxation response, which creates the whole cascade of decreased pain, decreased muscle tension, and increased focus—all the things the relaxation response does.

"That's why all the ancient traditions use breathing. They figured out that it has a significant impact on movement function—whether it's tai chi or karate or yoga," says Taylor. "And now we have the neuroscience to understand why."

In his practice, Taylor includes yoga breathing techniques and asanas (postures) with physical therapy.

What are the results? He says he has been able to help patients who could not be helped before. Just over 3 years after he opened his practice, he has a 6-week waiting list. The practice only accepts cash or Medicare.

Weaving Yoga Into PT Practice

Sara Meeks, PT, MS, GCS, KYT, is the owner of Sara Meeks Seminars in Gainesville, Florida, which offers seminars on osteoporosis for health care professionals.

In the late 1970s, Meeks went to a yoga class and was astounded both at the variety of movements used as well as how her body responded to it. "I remember thinking during the class that I was going to be really sore the next day, but I wasn't sore at all," says Meeks. "I began to wonder how I could weave yoga into a physical therapy practice. The more I did it, the more I could see the benefit of it: the breathing, the relaxation, the mindfulness of the practice, the idea that basically the word yoga means 'union'—the union of body, mind, and spirit, but also how you're paying attention to what you're

doing when you're doing it."

In clinical practice, Meeks focuses on the management of osteoporosis. She says that the elements of yoga that include relaxation helped this population, not only physically, but mentally as well because it enabled them to relax and deal with the anxiety, depression, and other emotional or psychological states that may accompany a diagnosis of osteoporosis.

"To help prevent compression fractures and other injuries, persons with osteoporosis need exercise that emphasizes weight bearing and body alignment, especially during activities of daily living," says Meeks. "That's also a part of yoga and the reason why I've found yoga very beneficial for this population."

Five years ago, Angie Pannell, PT, DPT, a physical therapist at PT's Center in Beckley, West Virginia, began taking yoga classes A year-and-a-half ago, she began using it with her clients. "Because I treat spine problems, I start with some really basic, easy yoga poses, and I incorporate them into what would be more traditional physical therapy exercises," says Pannell. "Because my patients were showing such good responses, I started to add Pilates and yoga classes into our schedule.



"I use yoga within a patient's plan of care," Pannell explains. She also offers classes at her practice that are diagnosis specific.

"For instance, right now I have several patients who can't weight bear on their knees. They have different knee pathologies and hip problems, so we tailor the yoga so that they don't have bear weight on their knees. We're staying out of activities that stress the knee joint, but are still getting them into certain poses to help lengthen the muscles and help with balance."

Compatibility of Yoga and Physical Therapy



In 1994, when she was diagnosed with Thoracic Outlet Syndrome, Emily Large, PT, RYT, CYT, owner of Living Large Therapeutics in Atlanta, Georgia, and West Palm Beach, Florida, was able to find only temporary relief from the severe nerve pain down her right arm despite having seen multiple physicians and other health care professionals. "It was only when I came to yoga that I found more lasting relief," Large says. After her own experience, Large studied yoga with the intent of incorporating it into physical therapy.

When she first sees a patient, Large will do a traditional physical therapy evaluation: the interview, the history taking, evaluating structure, and looking at range of motion, strength, and the like. But because she also incorporates yoga, she now includes a history that more broadly involves other aspects of the person's life. "I ask about their emotional state, how they are sleeping, how their digestion is," says Large.

"Even though as physical therapists our primary focus is structure, physical conditions, and movements, we all know that there are other factors involved that the person may be dealing with. Although I'm not treating the depression or the anxieties, I do have the capability of saying that there are breathing techniques that will help support patients in these areas. If they are working with a mental health care professional, I can consult with that person and go over some of the ideas I have for their yoga practice," she says.

Large also has found that she can use yoga with a range of patients—everyone from elite athletes to quadriplegics. "Yoga is an extremely efficient form of rehabilitation, incorporating strength, flexibility, balance, coordination, endurance, mental focus, and stress management into one therapeutic practice. It's very adaptable," she says.

Julie Gudmestad, PT, took a different path to incorporation yoga and physical therapy. Unlike many other physical therapists, Gudmestad was studying and teaching yoga before earning her degree in physical therapy. In fact, she began yoga in high school. She's now owner of Gudmestad and Associates, a physical therapy practice and yoga studio in Portland, Oregon Her experience with yoga led her to want to work with people and help them physically, which in turn led her to earn a physical therapy degree.

Gudmestad admits that when she started her private practice in 1983, using yoga with physical therapy was not well accepted. Today, she and her PTs do an evaluation and write up PT notes, and "our whole program is set up to meet people where they are and give them yoga that they can do in whatever shape they are

in," Gudmestad explains. Now a Iyengar yoga teacher, Gudmestad writes the "Anatomy of a Yogi" column for Yoga Journal.



She says that she has found yoga concepts and approaches are compatible with physical therapy. "Some patients with inflamed tissues can exacerbate the problem by doing repetitive activities. Many yoga poses are isometric—you get in a position and you hold. In Iyengar yoga, we get patients in a position of good alignment. Then the muscle has to just hold there, so we're going to build strength, and we're going to build alignment awareness without doing a lot of repetitive movements that could increase the inflammation," says Gudmestad. "I find that the relaxation emphasis in some of the yoga stretches can be most helpful for people who are dealing with pain."

Gudmestad also finds that her patients are so pleased with their results that they keep up on the exercises they are asked to do at home. "People feel good while they do yoga; they feel good afterwards. When they feel good when they leave, and they realize that they can feel good at home doing the same things, we tend to get better-than-average compliance," she says.

The Gentleness of Yoga



An important benefit to using yoga is that it can be gentle. That's why Mary Lou Galantino, PT, PhD, MSCE, professor of physical therapy at Richard Stockton College of New Jersey, began using it with patients in the 1980s. She was working with clients who had life-threatening illnesses. "I realized that some patients were unable to attain the aerobic capacity of several of the traditional exercise programs we would prescribe as PTs," says Galantino. "That's how I began my professional exploration of yoga in the clinic."

Galantino, who also does clinical research at the University of Pennsylvania, gives an example of using yoga with a recent patient. The client, an ice skater, had a total knee replacement and felt disconnected from the right side of her body. When Galantino asked if she had explored yoga postures, the woman responded that she wasn't skinny or flexible enough to do yoga.

"I took her through an entire yoga regiment in the clinic that day," says Galantino. "I did various postures that would increase weight bearing through the right knee. I had her weight bear on her knees by gently instructing her in "cat" and "cow" postures. Previously, she was unable to take her body weight through the right knee." After leading the woman through five asanas or postures, the patient was more in touch with the right side of her body. "She had a completely different gait when she stood up," says Galantino. "Yoga can be used in overall improvement of flexibility, strength, and balance."

This isn't to say that all yoga is gentle. In fact, Galantino has seen patients who have injured themselves trying to do intense power yoga, and they have injured their joints as a result of improper posturing. That's why it is especially important for PTs who want to incorporate yoga into their work to learn how to use it properly, all those interviewed for this article stress. It's also vital that they use their education and knowledge of the human body to determine the effects of yoga on the patient.

Yoga Knowledge and Training

There are many different types of yoga (see "A Brief Guide to Yoga Styles"), and not all kinds should be used with all patients. That is why, as with all interventions, it is important for physical therapists to understand what type of yoga they are using and what will best benefit a particular patient, the interviewed PTs say.

Meeks says that PTs who use yoga should be sure that patients with a particular diagnosis, such as osteoporosis, are screened by a medical professional before the PTs begin incorporating yoga. "If a physical therapist has a patient with osteoporosis, or a compression fracture, or a specific low-back pathology, certain contraindications go along with these diagnoses," says Meeks. "PTs should be knowledgeable about that. This is one of the reasons I teach what I teach."

Meeks also recommends that, if physical therapists want to bring yoga into their practices, they receive formal yoga training. "There's a lot of knowledge about yoga itself that they're not going to get just by going to a yoga class," she says. "People need training to learn about the background, and they need to experience it in their own bodies."

Pannell adds, "There isn't any pose I've ever asked patients to get into that I haven't done myself. I need to know what they feel like so that I can give them true feedback. Yoga is just

A Brief Guide to Yoga Styles

There are many different styles of yoga. These include the following:

Hatha

Hatha is a very general term that can encompass many of the physical types of yoga. If a class is described as Hatha style, it is probably going to be slow-paced and gentle and provide a good introduction to the basic yoga poses.1 See www.yogaville.org.

I yengar

This style of practice is most concerned with bodily alignment. In yoga, the word alignment is used to describe the precise way in which one's body should be positioned in each pose in order to obtain the maximum benefits and avoid injury. See www.lynaus.org.

Vinyasa

Like Hatha, Vinyasa is a general term that is used to describe many types of classes. Vinyasa, which means breath-synchronized movement, tends to be a more vigorous style based on the performance of a series of poses called Sun Salutations, in which movement is matched to the breath. A Vinyasa class typically will start with a number of Sun Salutations to warm up the body for more intense stretching.¹

Ashtanga

Ashtanga, which means "eight limbs" in Sanskrit, is a fast-paced, intense style of yoga. A set series of poses is performed, always in the same order. Ashtanga practice is physically demanding because of the constant movement from one pose to the next. Ashtanga also is the inspiration for what is called "Power Yoga." If a class is described as "Power Yoga," it will be based on the flowing style of Ashtanga, but not necessarily keep strictly to the set Ashtanga series of poses. See www.ashtanga.com.

another modality."

Large urges physical therapists to do their homework when selecting an appropriate yoga teacher. She says that because there is no regulation at this time for yoga teachers, PTs should take a "buyer beware" approach. A wide range of training is offered—everything from weekend courses to yoga therapy training courses to yoga therapy focused on particular conditions. Large stresses that physical therapists make sure they have a good understanding of the training of the yoga teachers they learn from.

Bikram

This style is more generally referred to as "Hot Yoga." It is practiced in a 95-100 degree room, which allows for a loosening of tight muscles and profuse sweating, which is thought to be cleansing. The Bikram method is a set series of 26 poses, but not all hot classes use this series. See www.bikramyoga.com.

1 Yoga Style guide. About.com: Yoga. Available at http://yoga.about.com/od/typesofyoga/a/yogatypes.htm. Accessed January 31, 2008.

Gudmestad also uses the phrase "buyer beware."
"Find a teacher whose style you like. If you respect the quality of their instruction, stay with it," says Gudmestad. She agrees that PTs should study yoga before using it with clients. "Yoga is not something that you should be teaching other people if you haven't worked on it yourself."

"I believe that therapists need to have an appreciation of their own bodies because we cannot treat someone if we're not present to ourselves," says Galantino. "It's also important that the clinician realize the emerging evidence for the benefits of yoga for each particular population."

Michele Wojciechowski is an award-winning freelance writer in Maryland and a frequent contributor to PT Magazine.

Evidence-Based Research

Much of the research being done to determine the effects of yoga on patients has focused on low back pain. However, other research has ranged from the effect of yoga on central arterial stiffness and fibromyalgia to the effects on menopause symptoms and osteoarthritis. Here's a brief sampling of the range of research.

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