

WHY IS THE GYROTONIC® METHODOLOGY A GOOD FIT FOR ME PROFESSIONALLY?

Using current concepts in Physical Therapy, how would I advise / describe to other physical therapists interested in learning, “What is GYROTONIC?” Marni Larkin PT OCS

Gyrotonic inventor Julio Horvath, was a professional dancer with a lumbar spine injury, and through his exploratory journey conceived the methodology. Over time, he also invented equipment that allowed easier access to understanding and benefiting from the work. There is the basic piece, referred to as the tower, the Leg Extension unit, the Jumping Stretching board, the GYROTONER® and the Archway. All are used to explore the principles of the methodology. Each piece of equipment, combined with a certain movement sequence allows either support within the movement, assistance within the movement, resistance within the movement, or any combination of the above. He also employs varying rhythms and speeds within the sequence depending on the goals.

A central component is the “breath work”. It is integral to all movement sequences, employing various rhythms, intensities and techniques to complement the demands of the movement. This breath work has been referred to as “the glue” enabling harmony within the “body-mind continuum.”

The Gyrotonic instructor uses “hands –on“ to deepen the person’s understanding of the movement requests. To use an example of spinal rotation during a movement sequence, the instructor may choose to provide hand cues that will encourage the client to guide their whole spine to rotate to the right or, alternatively, could focus on providing a tactile cue that will encourage the client to take a particular spinal segments into rotation at the T4-8 level as the movement sequence is occurring. As I am a physical therapist and it is within my scope of practice, I may add a “mobilization with movement” manual therapy technique.

The movements and sequences he has invented reflect an acute understanding of the role of gravity, and leverage, and how that plays into the Human Movement System. “Gyro” is a Greek root, meaning circle or spiral. The method was named using this prefix as an acknowledgment that **functional** human movement invariably involves a spiral component. Thus these sequences are purposely and inherently functional.

With my progressive understanding of the work, it became apparent that there were distinguishing features of every movement sequence that were the same as what was being reflected in current concepts in physical therapy.

Julio Horvath’s brother, Paul Horvath, (who is a Physical Therapist in Germany) took this work and added components to address specific issues for PT patient populations. Once a Gyrotonic teacher is licensed, he/she is then eligible to complete these courses. These courses also reflect use of the distinguishing features mentioned above.

In order to be able to ask the client / patient to perform the sequences, then cue verbally, visually or manually, one must be able to analyze the movement.

Hence, the Gyrotonic methodology creates a framework to analyze functional movement. Assessing trunk movements is the initial focus.

The findings in turn provide the framework for making treatment decisions within the movement systems perspective.

This relates to my role as the Physical Therapist by being

1) A PT able to assess and treat using “The Human Movement System’ approach.

To quote Shirley Sahrman:¹

“One of the important issues in education is whether adequate attention is devoted to analysis of movement and development of interventions that foster correction of problems induced by imprecise movement. Based on my 30 years of experience in teaching continuing education courses, I believe that physical therapist clinicians need additional skill in clinical observation of movement during their examination of patients. We should incorporate more detailed observation and analysis of movement while patients

perform functional activities into standardized physical therapist examinations. I believe many therapists currently take Feldenkrais and Pilates courses because they have not received adequate education in developing a basic exercise prescription, much less strength and conditioning programs. I am convinced that physical therapist development of movement system diagnoses and education in management of those diagnoses rather than the current emphasis on pathoanatomic diagnostic processes and phenomena would produce a focused and skilled physical therapy practitioner.¹”

In 2010, Marijeanne Liederbach wrote:

“Dance medicine rehabilitation clinicians must be able to formulate **whole body treatment approaches** from a firm command of the normal biomechanics of each joint in the body, the relationship between joints and joint couples, and a strong understanding of the regionally interdependent (RI) musculoskeletal examination model. The RI model asserts that musculoskeletal disorders often arise from problems in neighboring joints (different from the phenomenon of referred pain), and it requires that clinicians understand the normal variations in joint positions and joint ranges of motion between people, the correlated postures associated with those joint positions and motions, and the various compensations that can result because of them. To be effective with dancers in rehabilitation and reconditioning it is important to do an RI examination along with a full examination of the primary complaint site early in the treatment relationship, with the goal of optimizing alignment and motor control.²”

2) A PT with the skill set to not only able to provide supportive therapy (i.e. the more passive interventions, the “Band-Aids”) but to provide education on using movement / exercise AS THE BASE of the treatment approach therefore keeping the patient moving optimally though the lifespan – as per the APTA White Paper.³ “Physical Therapist Practice and the Human Movement System 2015.”

I have taken a couple of excerpts from the JOSPT April 2015 Editorial “Improving Long-Term Outcomes for Chronic Low Back Pain: Time for a New Paradigm?”

“Emphasize the importance of self management by making it a fundamental goal of treatment right from the beginning. Quite often, the physical therapy approach to CLBP has been to try and “fix the problem” with a short, intense period of intervention. Many patients never get the message that self-management is necessary for long-term episodic conditions, such as CLBP...This philosophic approach of a long term, actively evolving program will not be optimal for all people, especially those individuals who are averse to exercise. However, for many of our patients, taking a more aggressive, long-term, patient centered approach to self-management is likely to increase the cumulative dosage of exercise, which may allow them to achieve effective control over symptoms. This program may also result in meaningful improvements in attitudes and beliefs, as well as the quality-of-life benefits associated with health and fitness. A better patient-centered, long-term approach might just be the next big breakthrough for CLBP.⁴” This fits into the biopsychosocial model of care that the Gyrotonic methodology also fits into.

3) A PT with the understanding of Current Concepts in Treatment and how they relate to the Gyrotonic exercise methodology.

Within the progressive movement sequences lay many therapeutic layers –

i) The first being a **progressive dynamic trunk stabilization program** that varies from other programs in it’s eventual high level functional training to include spinal combined movements especially extension.

This falls in line very closely with the Kinetic Chain Rehabilitation Idea.

“The kinetic chain rehabilitation approach is not unlike other treatment philosophies in that the early or acute stage of rehabilitation is focused on protecting healing tissue and reducing pain. This is traditionally accomplished with protection (rest and/or immobilization), anti-inflammatory medication, and selected therapeutic modalities. However, these remedies are designed to treat the symptoms rather than the cause of dysfunction, therefore, a clinician **must not place extraneous amounts of effort in this phase or consider these treatments as the core of the therapy program.**

Following initial protection, the patient should be transitioned into what is known as the recovery phase of rehabilitation. At this point, a logical, progressive plan of treatment is implemented where muscle reeducation and soft tissue mobility become the focal points with respect to the stages of tissue healing in early rehabilitation. **Since the core drives kinetic chain function, it is imperative that optimal stabilization and force generation can occur. Muscle reeducation of the core muscles should begin early and target both local and global muscles.**”⁵

- ii) Secondly there is a neural tension “flossing’ component in the sequences,
- iii) Eccentric strengthening is a component of all the sequences as is
- iv) A plyometric power component.
- v) and finally, the nature of these movement sequences and the fact that each one requires use of the whole self, allows for concomitant changes in fascial integrity.

Keep in mind the sequences are progressive in nature and a patient does not take on the more challenging variations until the basics are well understood and performed.

Hence there is a very large motor learning component, and as progressive demands are placed on the system in terms of strength or power, an interplay between the motor learning component and strength demands occurs. How much focus on strength and power is entirely dependent on the patient / client / returning athlete – but there is a clear continuum between the first movement sequence learned and that same sequence performed with larger resistance demands via gravity and equipment use. This relates to the

v) Concepts of “Imbalances” – We learn many theories and treatment techniques regarding muscular, fascial or skeletal “imbalances.” Yanda’s crossed syndromes, Richardson’s global versus local imbalances, using joint mobilization or manipulation to “reset” centrally, trigger point therapy, muscle energy techniques, KMI, active versus passive stretching, functional versus isolated muscle strengthening. Unfortunately, time and again it seems that long term functional carry over to ADL is difficult to achieve. However, as we know from Motor Learning 101, once you learn a skill, you have it for life e.g. riding a bike.

The Gyrotonic sequential exercises involve learning a skill. In this way, some “overactive” muscles may be taught to quieten down and others may have to “up their game.”

This can be in the case of improvements in scapula-humeral rhythm, hence less “impingement” or teaching the deep neck flexors to “do their share.”

To quote from a popular culture article in ZCulture (online) “Lady Gaga Turns to the Gyrotonic Workout To Deal with Chronic Muscle Pain” by Trina Remedios,

“You are diligently indulging in cardio and strength training routines, five days a week; but, can they help strengthen and ease everyday functional movements? You know, like bending down to lift a bag, carrying your child, etc. That’s what Gyrotonic aims to do. The basic premise is to expand and contract the body to help it stabilize. In this way, stability is attained by a counterbalance of opposing forces.”

In summary, the Gyrotonic methodology, works as an excellent tool for movement system analysis and for both rehabilitation and cross training.

CAVEAT: On Julio’s journey he explored Eastern philosophies and techniques. There is another layer of explanation in Eastern terms I have not provided as that is best left to those with more expertise. However, I would like to include the following quotes from the Classical Martial Art Soo Bahk Do (Karate)
“ At all times pay attention to the waist. Relaxed clear awareness of the abdomen, the energy can be activated. **When the base of the spine is erect, energy rises to the top of the head.**”⁷

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