

Dear Editor,

I enjoyed the article Investigating a new model of assessing musculoskeletal disorder by Brent Swartzlander, DPT, OCS, in the August 11, 2008 edition. The concept of "*Regional Interdependence*" may be an old concept which of recent times is being expounded upon, yet unfortunately, it surely is not part of normative Physical Therapy practice, except in the minority. The term Regional Interdependence of course, is fairly recent, and I suspect only used in the first of the 20 references used for the article. I submit that as we are early in our use of this term, and that it may undergo some enhancement over time. What is to be celebrated is the fact that there are an increasing number of case studies and articles that demonstrate benefit from utilization of the concept, such as thoracic mobilization enhancing cervical function and decreasing pain, etc..

I believe that in time the term *Regional Interdependence* may evolve; perhaps a new term would be *Interregional Interdependence*. Why? Because distal regions of the body, rather than only proximal regions, do in fact interact. One example, a treatable anterior talus on the right (this mimics left rotation of lowest segments) which will invoke a right rotation of C1, with a typical motion compensatory coupling (motion restriction) at Occiput-C1. This is reflexively driven, as treatment of the primary problem in the foot and ankle can be manually resolved, and the upper cervical pattern will be significantly improved upon retesting. This reflex distal release occurs instantaneously, before the client stands, thus it is not gravity dependant. On occasion, a part of the cervical pattern will tend to recur, as noted on the next follow up visit, and may require specific treatment. When this does occur, it can be the segment below (permutation), and other times it is only one or 2 motion restrictions, a much lesser restriction than noted initially

An alternate name might be *Interregional Interdependence Permutation Model*. Why? Because the body does undergo permutation during the course of treatment, thus the body responds in a very counter-intuitive manner, in which what you see on initial examination is in fact, *not what you get*; as you start to treat proximal to distal, inferior to superior, etc. this model of care is much more readily apparent when treating the lowest denominator first, again going from inferior to superior. For example, upon restoring normal costo-vertebral mobility at one segment, the compensatory restriction on the opposite side of the body at a superior costovertebral segment may spontaneously resolve, yet the corresponding thoracic segment may then present anew, with restricted mobility, which was not encountered initially.

Noteworthy is the fact that the body can have different restrictions of the musculoskeletal system in different positions. Thus it is important to evaluate the structures in neutral weight bearing (WB) and in flexion and extension WB, in non weight bearing extension and flexion, etc. One of the most relevant postures is "Muslim Prayer Position", in which the entire spine, pelvis and lower extremities are fully flexed. This posture often reveals restrictions that are not noted in other positions or contexts. So perhaps a working model might be titled the *Interregional Multiple Context Interdependence Permutation Model*. How nice it would be if all case studies and research articles mentioned the proximal and distal compensations and adaptations to the primary musculoskeletal dysfunction. It is somewhat surprising that at present, this is extremely rare. Thank you for allowing me to share my thoughts.

Sincerely,

Jerry Hesch, MHS, PT

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