ABSTRACT

Treatment plans employed by physical therapists involved in musculoskeletal rehabilitation may follow a conventional medical-model approach, isolating care at the tissue level but neglecting consideration for neurocognitive contributions to recovery. Understanding and integration of motor learning concepts into physical therapy practice is integral for influencing the human movement system in the most effective manner. One such motor learning concept is the use of verbal instruction to influence the attentional focus of the learner. Evidence suggests that encouraging an external focus of attention through verbal instruction promotes superior motor performance, and more lasting effects of a learning experience than an internal focus of attention. Utilizing an external focus of attention when instructing a patient on a motor task may facilitate improved motor performance and improved functional outcomes in treatment plans devised to address musculoskeletal injury and movement disorders. The purpose of this review is to summarize the basic principles of motor learning and available evidence on the influence an external focus of attention has on motor learning and performance, including the benefits of an external focus of attention over an internal focus of attention and how therapists may inadvertently encourage the latter. Furthermore, the benefits of possessing greater awareness of neurocognitive mechanisms are discussed to exhibit how implementing such concepts into musculoskeletal rehabilitation can maximize treatment outcomes.

Level of Evidence: 5

Key Words: Focus of attention, motor learning, movement system, musculoskeletal rehabilitation