The purpose of this literature analysis is to review the efficacy of an external versus internal focus of attention in motor learning. An intervention study utilizing a novel Motion Guidance Visual Feedback System was designed to investigate whether an external focus of attention would improve motor learning compared to an internal focus of attention. The study was conducted with female athletes who had no previous history of anterior cruciate ligament (ACL) injury. Participants were randomized into two groups: external focus of attention (100% group) and internal focus of attention (33% group). The intervention consisted of 30 practice trials each day for 3 days. The maximum throwing distances were measured and compared between the two groups. The study found that the external focus group performed significantly better than the internal focus group, with a 5% increase in throwing accuracy. This suggests that an external focus of attention is more effective than an internal focus of attention in motor learning.

References

Literature demonstrates that the type of focus of attention (external vs. internal) provided to a learner is a key factor in their ability to learn a new movement pattern. The consensus from the reviewed literature is that an external focus of attention is more effective than an internal focus of attention when teaching a new skill. The more complex or challenging the task, the greater the advantages of adopting an external focus of attention. The challenge in the rehab setting is applying an external focus of attention to common therapeutic exercises.

The single leg squat is a validated screening tool to identify knee biomechanics that are potentially deleterious, such as medial knee displacement.

Conclusion
Providing an external focus of attention to patients with faulty joint alignment may help increase motor learning in an effort to retrain movement. Currently, no one has investigated the effectiveness of a novel laser visual guidance system (Motion Guidance) to improve single leg squat kinematics. Using these principles, we hypothesize that the Motion Guidance System, used as an external focus of attention, will be more effective at improving MKD during a single leg squat.