Objective

- Determine the effect of subjective handedness on the amount of bilateral transfer.
- Provide a basis of hemiplegic stroke patient outcome and progression timeframe based on patient handedness.
- Indicate the ability to transfer fine tune or gross motor patterns in sports performance between right and left handed players.

Methods

- Participants voluntarily agreed to schedule a one-time test after an email recruitment letter.
- After a concise study introduction, participants completed the informed consent and completed a subjective handedness survey.
- With a blinder blocking the view of the active hand, participants used a pencil to trace a star-shaped pattern using a handheld mirror reflection as fast and accurately as possible.
- Errors were counted each time the participant traced outside of the lines of the star pattern. A stopwatch began second count at a “go” signal from the researcher, and stopped when the participant completed the tracing pattern.
- The pattern for tracing was as follows: 1 time with non-dominant hand, 7 times for dominant hand, 1 time for non-dominant hand with 30 second breaks in between.

Participants

- A total of 14 college age students were enrolled in this study, 50% (N=7) were female, and 35% (N=5) were left handed.
- Significant differences were found in the pre to post test scores in both the number of errors (p=0.0001) and time to complete the task (p=0.005).
- When stratified by dominant hand (left or right), only time to complete task was significantly different (p=0.04); whereas, the number of errors was not significantly different (p=0.09).