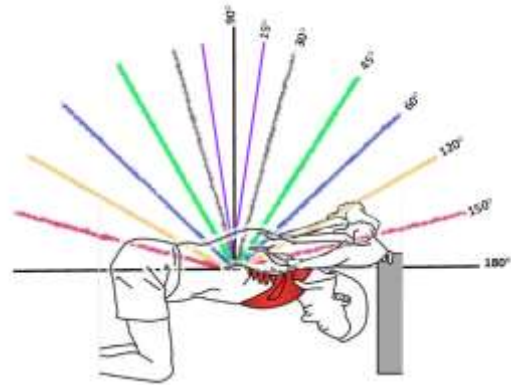
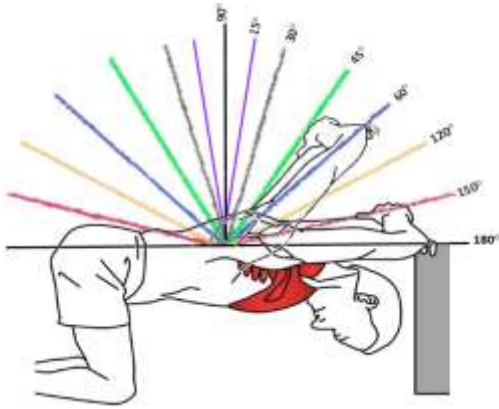


Optimal and minimum ranges of movement in shoulder and hip joints for an Artistic Gymnast:

Shoulder: Optimal 45°

Minimum 120°



Hip: Optimal 120°

Minimum 180°

