







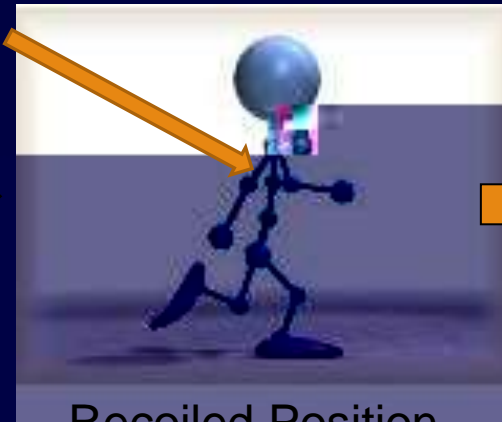




# Model of Walking Gait: Full body movement



Extended Position



Recoiled Position



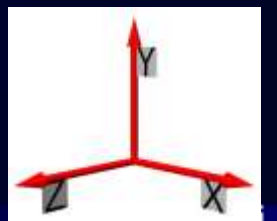
Passing Position



Falling Position



Extended Position



Head-on view

Overhead view



## Relationship with Hip Movement in Walking

Figure 2: Top view of hip movement showing how shoulder movement relates to hip rotation. As the back leg (black arrow) is back, the opposite shoulder (green arrow) is swinging forward.





# Experimental Design

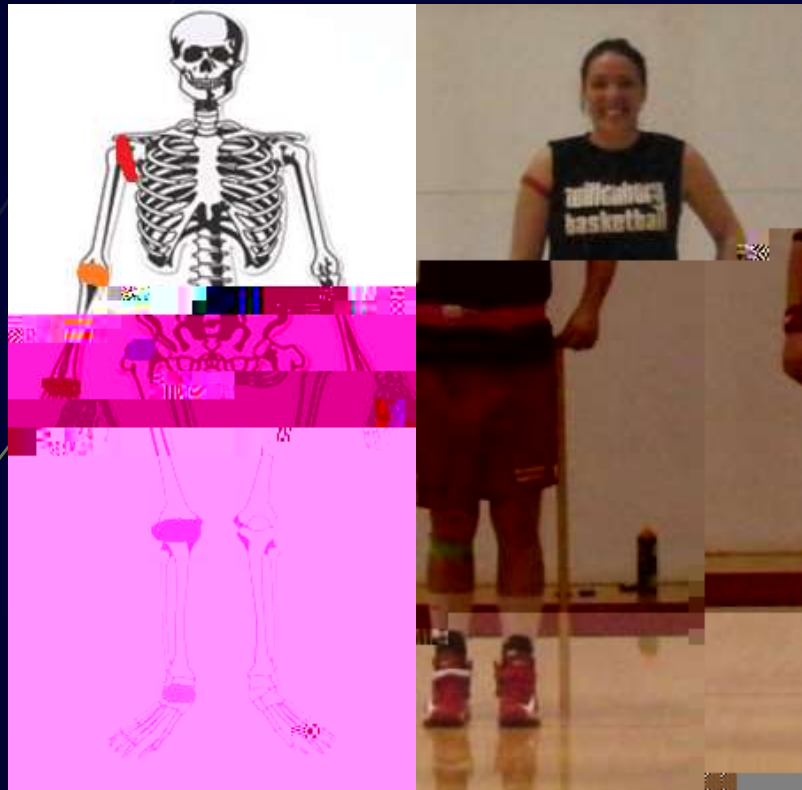


Figure 4: Model of Data Collection





















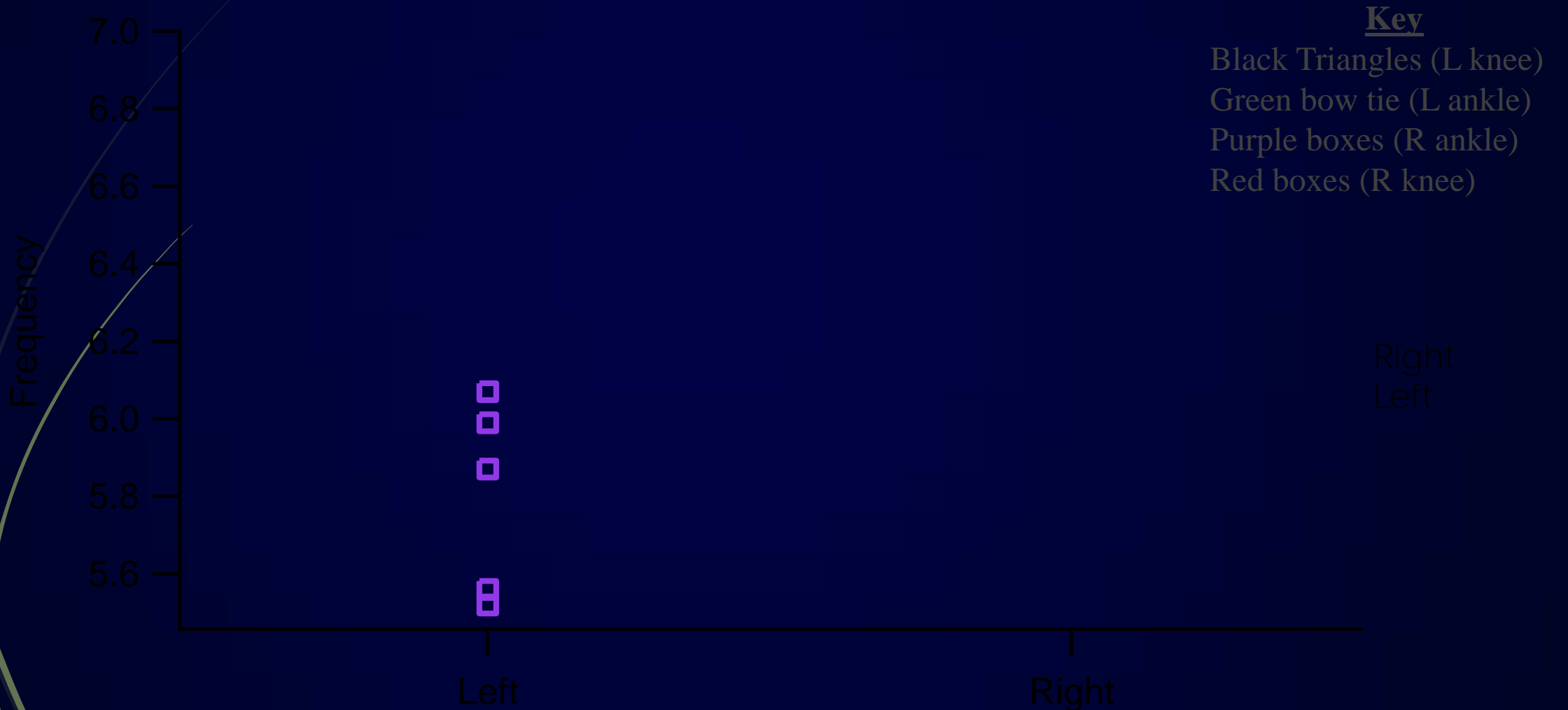


# Results of Left Knee Side Injury

Table 4: Comparison between arm location and their corresponding arm frequency in left knee injury.

<u>Arm Location</u>	<u>Frequency</u>
Right Elbow	$5.71 \pm 0.05$
Left Elbow	$5.52 \pm 0.03$
Right Hand	$5.83 \pm 0.02$
Left Hand	$5.50 \pm 0.02$

# Major Results: Comparison with Data sets to Control



Left and Right Shoulder

















