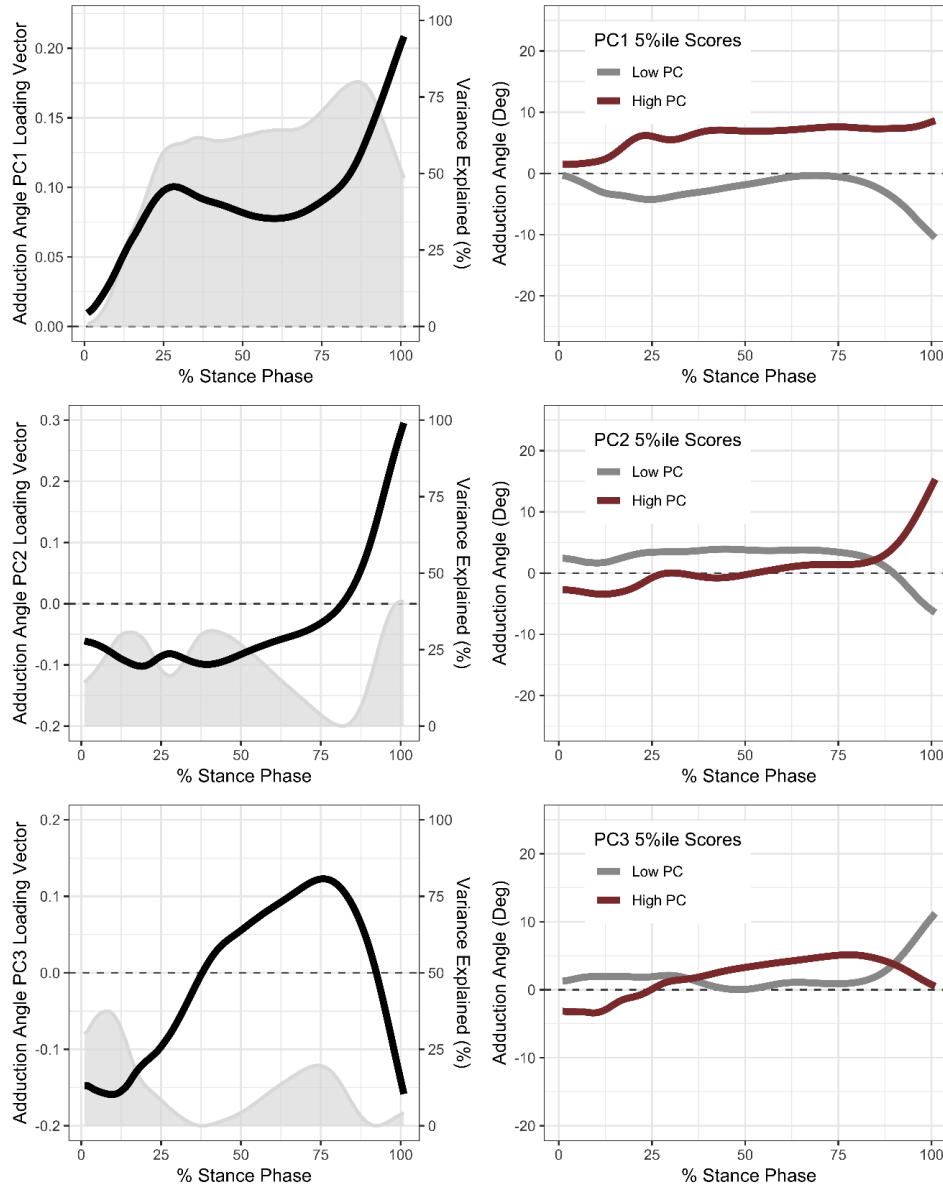
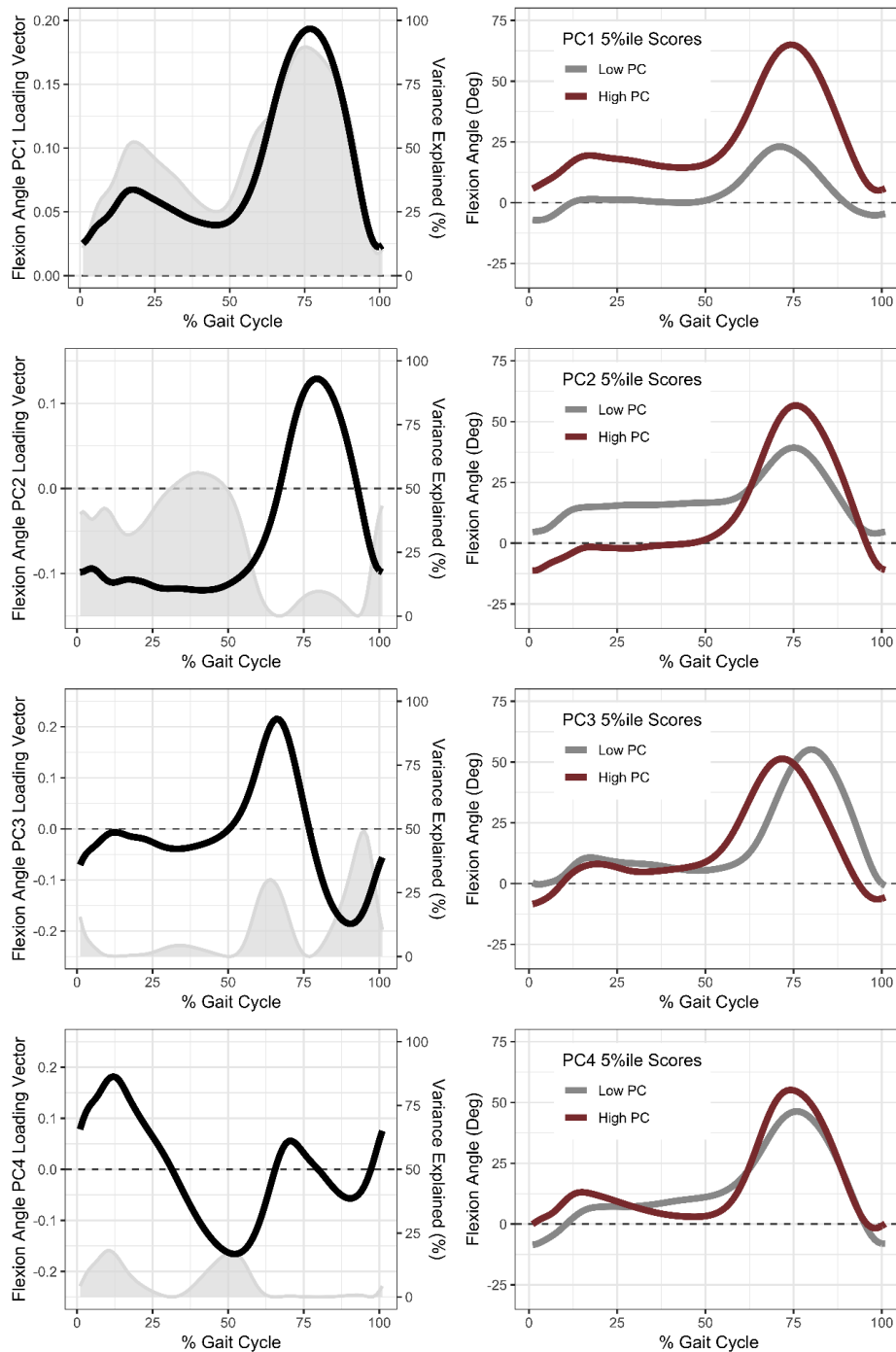


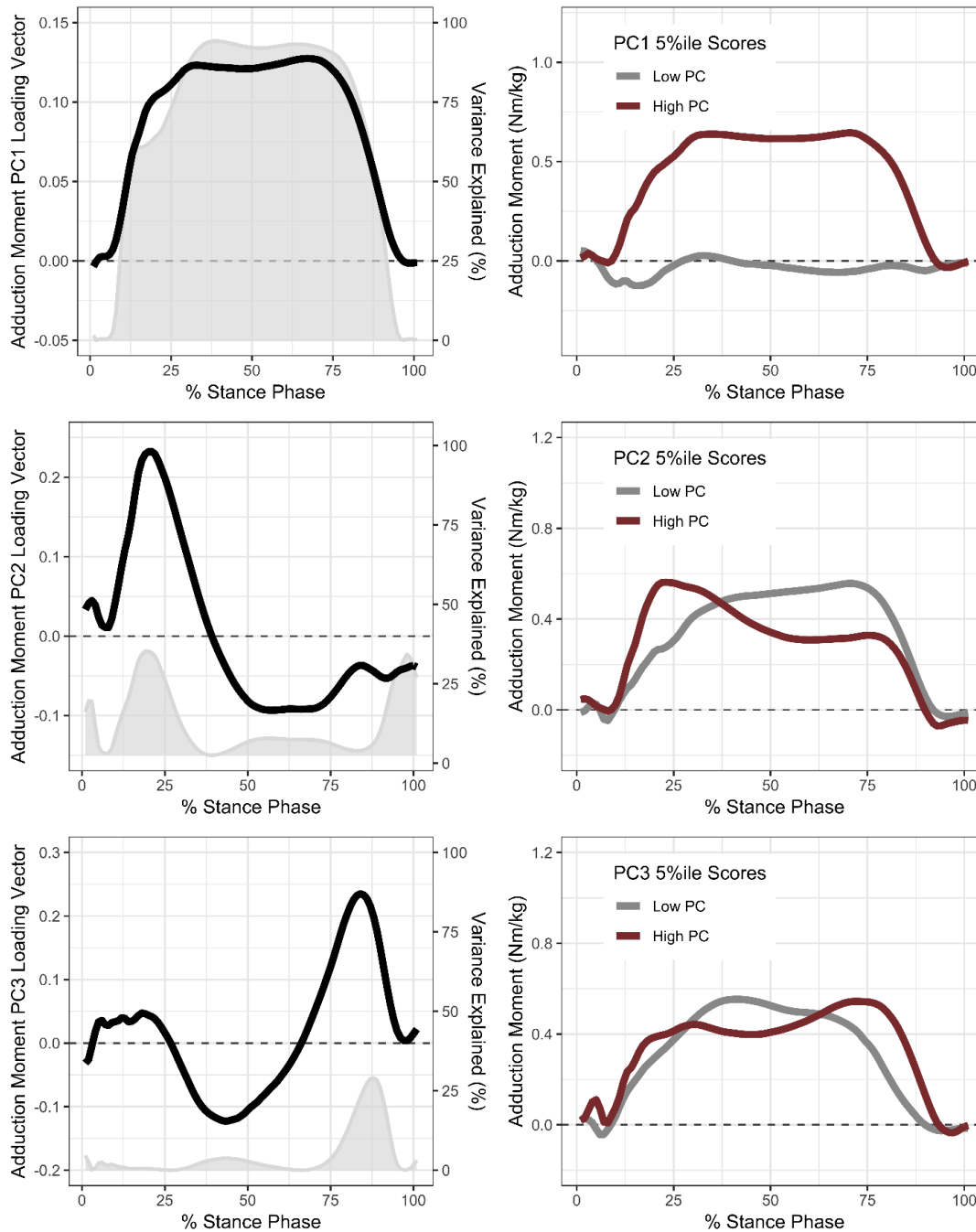
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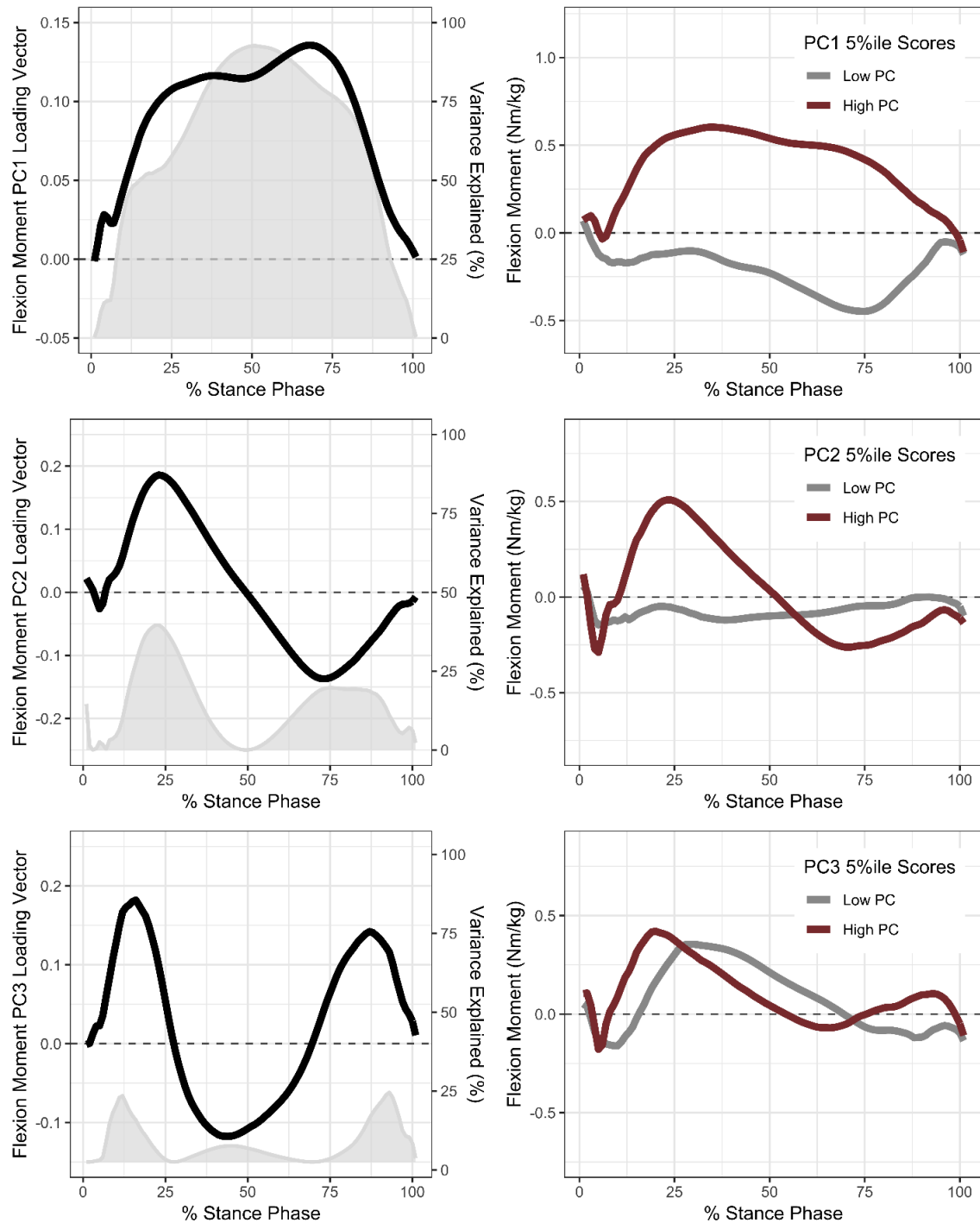
Supplementary Figure 1 – Knee adduction angle principal components. Left) loading vectors (solid) and corresponding variance explained (grey shaded region) across the stance-phase of one gait cycle for PCs 1-3. Right) Example waveforms with high (95th percentile) and low (5th percentile) PC scores across the stance-phase of one gait cycle for PCs 1-3.



Supplementary Figure 2 – Knee flexion angle principal components. Left) loading vectors (solid) and corresponding variance explained (grey shaded region) across one complete gait cycle for PCs 1-4. Right) Example waveforms with high (95th percentile) and low (5th percentile) PC scores across one complete gait cycle for PCs 1-4.



Supplementary Figure 3 – Knee adduction moment principal components. Left) loading vectors (solid) and corresponding variance explained (grey shaded region) across the stance-phase of one gait cycle for PCs 1-3. Right) Example waveforms with high (95th percentile) and low (5th percentile) PC scores across the stance-phase of one gait cycle for PCs 1-3.



Supplementary Figure 4 – Knee flexion moment principal components. Left) loading vectors (solid) and corresponding variance explained (grey shaded region) across the stance-phase of one gait cycle for PCs 1-3. Right) Example waveforms with high (95th percentile) and low (5th percentile) PC scores across the stance-phase of one gait cycle for PCs 1-3.