

## EFFECT OF TRAINING PROGRAMS (INDIVIDUAL ANALYSIS)

### Ball Speed

Training group	Participant	Before (m/s)	After (m/s)	Difference (m/s)	±90% CI (m/s)	Interpretation
Intervention	1	32.6	34.7	2.1	0.9	Probably beneficial
	2	32.0	31.7	-0.3	0.3	Probably trivial
	3	30.9	32.5	1.7	0.5	Probably beneficial
	4	30.8	31.6	0.8	0.6	Possibly trivial
	5	30.6	31.2	0.6	0.2	Probably trivial
Control	6	31.6	—	—	—	—
	7	31.0	30.2	-0.8	0.4	Possibly trivial
	8	29.5	—	—	—	—
	9	28.9	29.6	0.8	0.8	Possibly trivial
	10	27.3	27.9	0.6	0.6	Probably trivial

### Accuracy

Training group	Participant	Before (point)	After (point)	Difference (point)	±90% CI (point)	Interpretation
Intervention	1	1.5	2.7	1.2	0.7	Almost certainly beneficial
	2	2.0	2.7	0.7	0.6	Unclear
	3	1.7	2.7	1.0	0.6	Probably beneficial
	4	1.8	2.5	0.7	0.6	Unclear
	5	1.6	2.3	0.7	0.8	Unclear
Control	6	2.5	—	—	—	—
	7	2.2	2.2	0.0	0.5	Unclear
	8	1.4	—	—	—	—
	9	1.9	2.3	0.4	0.7	Unclear
	10	1.8	1.6	-0.2	0.4	Unclear

## EFFECT OF TRAINING PROGRAMS (INDIVIDUAL ANALYSIS)

### Back Foot Angle

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	106	109	3	5	Probably trivial
	2	40	38	-2	7	Probably trivial
	3	34	36	2	7	Probably trivial
	4	73	64	-9	4	Probably trivial
	5	59	36	-23	8	Possibly decreased
Control	6	63	—	—	—	—
	7	73	40	-33	7	Almost certainly decreased
	8	35	—	—	—	—
	9	56	76	20	5	Possibly trivial
	10	103	82	-22	8	Possibly decreased

### Front Foot Angle

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	15	3	-12	3	Possibly trivial
	2	-14	-7	7	10	Probably trivial
	3	4	-3	-7	6	Possibly trivial
	4	-5	6	12	5	Possibly trivial
	5	-4	-1	3	6	Probably trivial
Control	6	15	—	—	—	—
	7	5	20	16	6	Probably trivial
	8	-7	—	—	—	—
	9	41	0	-41	6	Almost certainly decreased
	10	40	34	-6	10	Probably trivial

\* Foot angle measured in clockwise direction relative to direction of run-up

## EFFECT OF TRAINING PROGRAMS (INDIVIDUAL ANALYSIS)

### Knee Angle (Back Foot Contact)

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	174	176	1	3	Probably trivial
	2	147	143	-4	4	Possibly trivial
	3	150	146	-4	4	Possibly trivial
	4	163	161	-3	4	Probably trivial
	5	142	141	-1	3	Probably trivial
Control	6	155	—	—	—	—
	7	154	152	-2	4	Probably trivial
	8	142	—	—	—	—
	9	149	163	14	5	Probably increased
	10	166	168	3	4	Probably trivial

### Knee Angle (Front Foot Contact)

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	154	162	8	5	Possibly trivial
	2	159	164	5	5	Possibly trivial
	3	141	160	19	5	Almost certainly increased
	4	164	170	6	5	Possibly trivial
	5	147	148	1	6	Probably trivial
Control	6	175	—	—	—	—
	7	162	177	15	3	Probably increased
	8	156	—	—	—	—
	9	177	169	-8	3	Possibly trivial
	10	172	179	7	4	Possibly trivial

### Knee Angle (Release)

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	132	128	-4	5	Possibly trivial
	2	177	172	-5	5	Possibly trivial
	3	131	125	-6	5	Possibly trivial
	4	179	176	-3	3	Possibly trivial
	5	128	125	-3	5	Possibly trivial
Control	6	153	—	—	—	—
	7	180	173	-7	6	Possibly trivial
	8	131	—	—	—	—
	9	176	176	1	4	Probably trivial
	10	180	178	-2	2	Possibly trivial

## EFFECT OF TRAINING PROGRAMS (INDIVIDUAL ANALYSIS)

### Shoulder Angle (Back Foot Contact)

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	37	23	-14	5	Possibly trivial
	2	78	79	1	4	Probably trivial
	3	59	63	4	2	Probably trivial
	4	49	48	0	5	Probably trivial
	5	50	68	18	4	Possibly trivial
Control	6	32	—	—	—	—
	7	51	11	-40	9	Almost certainly decreased
	8	—	—	—	—	—
	9	48	39	-9	4	Probably trivial
	10	67	79	12	10	Possibly trivial

### Shoulder Angle (Front Foot Contact)

Training group	Participant	Before (deg)	After (deg)	Difference (deg)	±90% CI (deg)	Interpretation
Intervention	1	24	43	20	4	Possibly trivial
	2	17	22	5	5	Probably trivial
	3	73	75	2	4	Probably trivial
	4	17	37	20	7	Possibly trivial
	5	95	77	-18	5	Possibly trivial
Control	6	10	—	—	—	—
	7	7	18	11	4	Possibly trivial
	8	—	—	—	—	—
	9	6	42	36	7	Almost certainly increased
	10	9	27	19	4	Possibly trivial

\* Foot angle measured in anti-clockwise direction relative to direction of run-up

## EFFECT OF TRAINING PROGRAMS (GROUP ANALYSIS)

### Intervention (n=5)

Variable	Meaningful difference	Mean difference	±90%CI	p-value	Cohen's <i>d</i>	Within-pair correlation	Interpretation
Ball speed (m/s)	1.5	0.99	0.87	0.07*	1.08	0.77	Possibly trivial
Accuracy (points)	0.1	0.85	0.24	<0.01*	3.38	0.21	Almost certainly beneficial
Back foot angle (deg)	20	-5.7	10.1	0.30	-0.53	0.94	Probably trivial
Front foot angle (deg)	20	0.5	9.3	0.92	0.05	0.42	Probably trivial
Back knee angle at back-foot contact (deg)	10	-2.0	2.3	0.13	-0.85	0.99	Probably trivial
Front knee angle at front-foot contact (deg)	10	7.8	6.5	0.06*	1.16	0.70	Possibly trivial
Front knee angle at ball release (deg)	10	-4.2	1.2	<0.01*	-3.41	0.99	Very likely trivial
Shoulder angle at back-foot contact (deg)	20	1.6	10.7	0.77	0.14	0.86	Probably trivial
Shoulder angle at front-foot contact (deg)	20	5.6	14.8	0.46	0.36	0.94	Possibly trivial

### Control (n=3)

Variable	Meaningful difference	Mean difference	±90%CI	p-value	Cohen's <i>d</i>	Within-pair correlation	Interpretation
Ball speed (m/s)	1.5	0.20	1.43	0.72	0.24	0.93	Possibly trivial
Accuracy (points)	0.1	0.08	0.43	0.65	0.30	0.78	Unclear
Back foot angle (deg)	20	-11.5	19.4	0.55	-0.42	0.30	Unclear
Front foot angle (deg)	20	-10.5	48.3	0.59	-0.37	-0.16	Unclear
Back knee angle at back-foot contact (deg)	10	4.9	14.0	0.42	0.59	0.53	Possibly trivial
Front knee angle at front-foot contact (deg)	10	4.5	19.5	0.57	0.39	-0.61	Unclear
Front knee angle at ball release (deg)	10	-2.6	6.1	0.34	-0.71	-0.11	Probably trivial
Shoulder angle at back-foot contact (deg)	20	-12.1	44.0	0.51	-0.46	0.82	Unclear
Shoulder angle at front-foot contact (deg)	20	21.6	21.6	0.10	1.68	-0.62	Possibly increased

\* Statistically significant at  $\alpha = 0.10$