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Citation:

Burton, AM and Cowburn, I and Eisenmann, JC and Till, K (2021) Physical education teachers and strength and conditioning coaches' perceptions of motor competencies across different stages of maturity. In: The British Association of Sport and Exercise Sciences Conference, 16 Nov - 18 Nov 2021, Online. (Unpublished)

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Physical Education Teachers and Strength and Conditioning Coaches' Perceptions of Motor Competencies Across Different Stages of Maturity

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

Study Background and Research Aims

JOURNAL OF SPORTS SCIENCES
<https://doi.org/10.1080/02640414.2021.1949189>

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Developing motor competency in youths: Perceptions and practices of strength and conditioning coaches

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World Health Organization 2020 guidelines on physical activity and sedentary behaviour

Fiona C. I. [Journal of Science and Medicine in Sport 22 \(2019\) 201–205](#)
Matthew
Jean-Phil  Contents lists available at [ScienceDirect](#)

Aims: To investigate PE teachers and S&C coaches perceptions of motor competency importance and compare perceptions across different stages of maturity.

 **ELSEVIER** journal homepage: www.elsevier.com/locate/jsams 

Review

Motor competence and health related physical fitness in youth: A systematic review

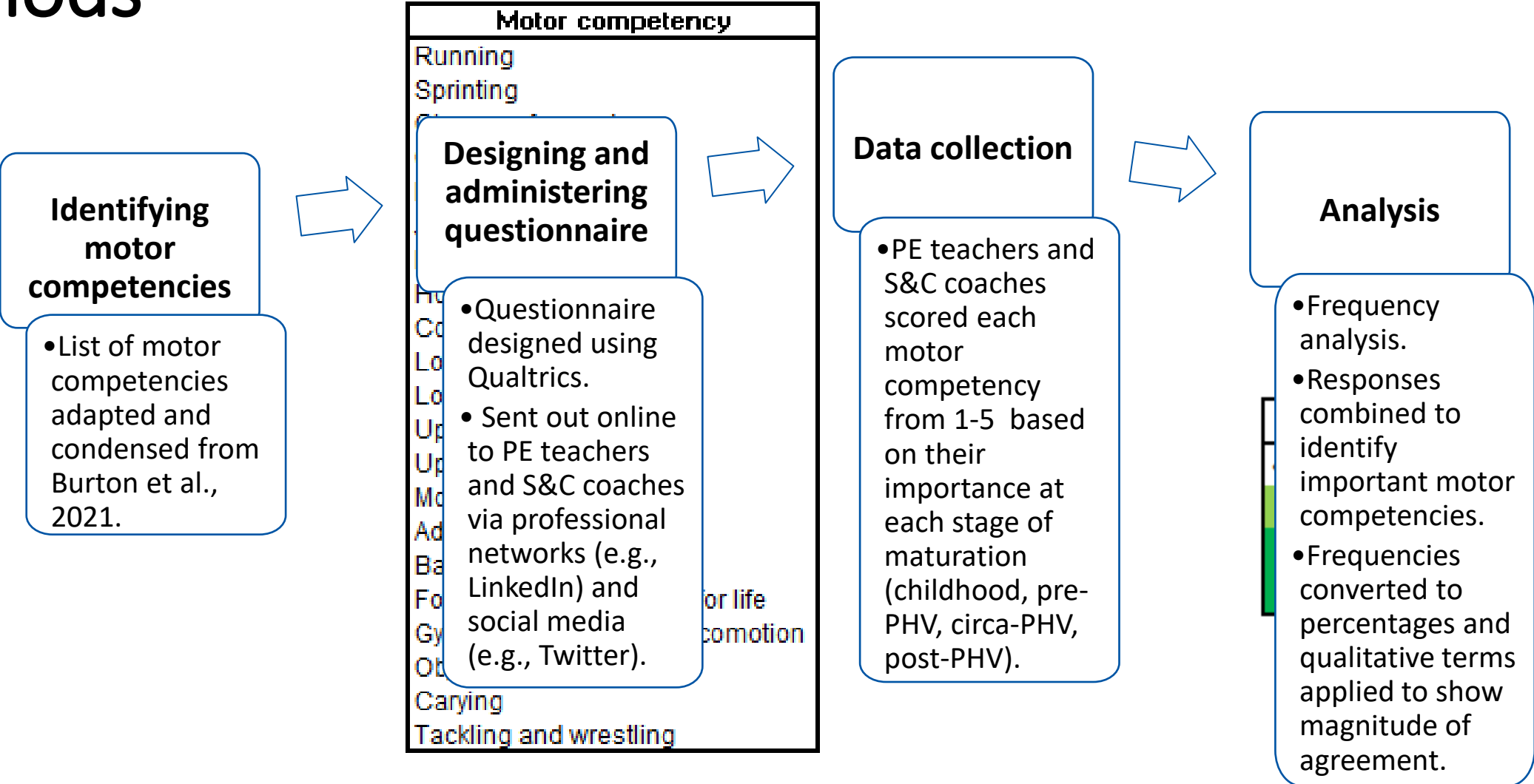


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Physical education programmes of study: key stages 3 and 4
National curriculum in England



Methods



Results

	PE teacher's perceptions											
	Childhood			Pre PHV			Circa PHV			Post PHV		
	Mean	STDEV	% 4 or 5	Mean	STDEV	% 4 or 5	Mean	STDEV	% 4 or 5	Mean	STDEV	% 4 or 5
Running	4.68	0.66	85	4.40	0.71	70	4.23	0.84	61	3.96	1.14	55
Sprinting	3.36	1.15	31	3.96	0.88	49	4.40	0.71	70	4.34	0.89	68
Change of speed	3.68	1.02	40	4.17	0.73	57	4.34	0.70	66	4.45	0.85	73
Change of direction	4.13	1.06	60	4.40	0.74	69	4.53	0.62	76	4.32	0.89	66
Reactive agility	3.89	1.18	53	4.19	0.88	62	4.23	0.73	61	4.09	0.90	55
Jumping	4.43	0.83	71	4.49	0.75	75	4.19	0.80	59	3.96	0.93	48
Landing	4.30	0.93	66	4.32	0.69	65	4.30	0.75	64	4.09	0.93	56
Hopping & Bounding	4.02	0.97	53	4.26	0.74	62	4.11	0.76	55	4.02	0.90	53
Core bracing	3.40	1.25	36	3.81	1.01	45	4.19	0.85	61	4.21	0.93	62
Lower body bilateral	3.00	1.16	21	3.77	0.94	42	4.36	0.64	67	4.47	0.80	75
Lower body unilateral	2.85	1.06	17	3.57	0.95	34	4.02	0.87	53	4.32	0.86	67
Upper body pushing	2.53	1.06	10	3.34	0.96	26	4.09	0.78	54	4.43	0.83	73
Upper body pulling	2.45	1.04	8	3.26	1.05	25	3.98	0.90	51	4.34	0.96	70
Mobility	3.83	1.42	57	4.11	1.05	59	4.36	0.74	67	4.49	0.80	75
Advanced weightlifting	1.09	0.28	0	1.62	0.77	0	2.36	1.09	7	3.36	1.17	32
Balance	4.70	0.72	87	4.70	0.51	84	4.51	0.78	76	4.32	0.93	68
Foundation movements for life	4.62	0.74	81	4.72	0.50	85	4.53	0.72	76	4.28	0.85	64
Gymnastics and other locomotion	4.43	0.74	71	4.23	0.79	62	3.68	0.89	36	3.36	1.03	28
Object control	4.49	0.95	78	4.55	0.65	77	4.34	0.76	66	4.13	0.88	57
Carying	4.21	1.06	65	4.02	1.03	56	3.60	1.23	43	3.43	1.21	34
Tackling and wrestling	2.04	1.20	9	2.66	1.27	19	3.17	1.19	26	3.43	1.25	36
Number of movements important (majority - 55-74%)	6			10			11			14		
Number of movements important (most > 75%)	4			3			2			0		
Total (important)	10			13			14			15		

	S&C coaches' perceptions											
	Childhood			Pre PHV			Circa PHV			Post PHV		
	Mean	STDEV	% 4 or 5	Mean	STDEV	% 4 or 5	Mean	STDEV	% 4 or 5	Mean	STDEV	% 4 or 5
Running	4.40	0.89	88	4.44	0.74	85	4.52	0.62	94	4.13	1.18	79
Sprinting	4.00	1.15	73	4.40	0.82	83	4.63	0.64	92	4.77	0.56	98
Change of speed	3.85	1.11	63	4.19	0.89	81	4.46	0.80	90	4.69	0.78	94
Change of direction	4.00	1.03	71	4.33	0.78	81	4.58	0.58	96	4.73	0.57	98
Reactive agility	3.94	1.10	65	4.15	0.92	73	4.40	0.82	79	4.58	0.87	92
Jumping	4.40	0.82	83	4.44	0.65	92	4.46	0.82	88	4.56	0.80	94
Landing	4.56	0.65	92	4.56	0.62	94	4.58	0.54	98	4.25	1.04	85
Hopping & Bounding	3.83	0.97	60	4.13	0.91	69	4.23	0.83	83	4.40	0.87	92
Core bracing	3.35	1.04	42	3.81	0.82	65	4.33	0.72	85	4.27	1.05	85
Lower body bilateral	3.73	1.01	54	4.23	0.81	77	4.44	0.80	85	4.46	0.87	92
Lower body unilateral	3.67	1.00	54	4.21	0.80	77	4.58	0.68	90	4.60	0.79	94
Upper body pushing	3.38	1.06	44	3.77	0.90	56	4.25	0.73	83	4.27	0.98	88
Upper body pulling	3.44	1.09	48	3.85	0.92	60	4.31	0.69	88	4.38	0.94	90
Mobility	3.13	1.18	33	3.75	0.96	60	4.40	0.84	85	4.44	0.87	92
Advanced weightlifting	1.67	0.91	2	2.44	1.13	19	3.19	1.16	42	3.54	1.32	63
Balance	4.33	1.00	85	4.10	0.88	75	4.10	0.88	75	3.33	1.29	54
Foundation movements for life	4.58	0.87	83	4.17	0.91	75	3.67	0.97	52	2.81	1.35	35
Gymnastics and other locomotion	4.56	0.74	90	4.10	0.86	73	3.60	1.01	54	2.71	1.25	33
Object control	4.67	0.72	94	4.42	0.79	85	4.06	1.00	71	3.50	1.38	60
Carying	3.54	1.20	52	3.56	1.05	52	3.44	1.11	46	3.02	1.36	46
Tackling and wrestling	2.85	1.20	29	3.15	1.11	38	3.50	1.15	56	3.52	1.30	67
Number of movements important (majority - 55-74%)	5			7			2			3		
Number of movements important (most > 75%)	7			11			15			14		
Total (important)	12			18			17			17		

Implications

Number of movements important (majority - 55-74%)	6	10	11	14
Number of movements important (most > 75 %)	4	3	2	0
Total (important)	10	13	14	15

Number of movements important (majority - 55-74%)	5	7	2	3
Number of movements important (most > 75 %)	7	18	15	14
Total (important)	12	25	17	17

Lower body bilateral	2.85	1.06	17	3.57	36	0.87	53	4.32	0.86	67	
Lower body unilateral	2.53	1.06	17	3.40	21	0.78	54	4.43	0.83	73	
Upper body pushing				3.00	17	0.90	51	4.34	0.96	70	
Upper body pulling				2.85	10	0.74	67	4.49	0.80	75	
Core bracing				2.53	8	1.09	7	3.36	1.17	32	
Lower body bilateral				2.45	8	0.78	76	4.32	0.93	68	
Lower body unilateral				2.50	85	4.53	0.72	76	4.28	0.85	64
Upper body pushing				0.79	62	3.68	0.89	36	3.36	1.03	28
Upper body pulling					77	4.34	0.76	66	4.13	0.88	57
Core bracing											
Lower body bilateral											
Lower body unilateral											
Upper body pushing											
Upper body pulling											
Core bracing											
Number of movements important (majority - 55-74%)	6	10	11	14							
Number of movements important (most > 75 %)	4	3	2	0							
Total (important)	10	13	14	15							



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IF perceptions translate to practice, PE alone may provide insufficient motor competence development

