

Full title: The Acute Demands of Repeated-Sprint Training on Physiological, Neuromuscular, Perceptual and Performance Outcomes in Team Sport Athletes: A Systematic Review and Meta-Analysis

Running heading: Acute Demands of Repeated-Sprint Training

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Supplementary Table S1. Modified Downs and Black scale outcomes for the assessment of reporting quality and risk of bias.

Study	Item number														Total score (out of 14)
	1	2	3	6	7	10	12	15	16	18	20	22	23	25	
Abt et al. [118]	1	1	0	1	1	1	0	0	1	1	1	0	0	1	9
AbuMoh'D et al. [180]	1	1	0	1	1	1	0	1	1	1	1	0	1	1	11
Aguiar et al. [95]	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9
Akenhead et al. [57]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Alemдарoğlu et al. [23]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Almansba et al. [96]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Alizadeh et al. [167]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Altimari et al. [181]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Archiza et al. [182]	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12
Attene et al. [115]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Ayarra et al. [183]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Aziz et al. [184]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Baldi et al. [185]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Balsalobre-Fernández et al. [186]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Beato et al. [187]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	10
Beato et al. [188]	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9
Beato & Drust [162]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	9
Beaven et al. [189]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Binnie et al. [190]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Binnie et al. [191]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Binnie et al. [192]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Blasco-Lafarga et al. [108]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Borges et al. [193]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10
Brahim et al. [97]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Brini et al. [154]	1	1	0	1	1	0	0	0	1	1	1	0	0	1	8
Brini et al. [98]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Brini et al. [194]	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9
Brini et al. [195]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Brini et al. [46]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Brocherie et al. [196]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Brocherie et al. [54]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Brocherie et al. [197]	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12
Broderick et al. [141]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Buchheit [198]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Buchheit et al. [59]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Buchheit et al. [60]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Buchheit et al. [99]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Campa et al. [168]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Campos et al. [199]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Campos-Vazquez et al. [200]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	10
Caprino et al. [201]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Castagna et al. [153]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Castagna et al. [202]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Chaouachi et al. [203]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Charlot et al. [204]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Chen et al. [205]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Clifford et al. [34]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Corrêa et al. [206]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Costello et al. [127]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Cuadrado-Peñafiel et al. [207]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Da Silva et al. [208]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Dal Pupo et al. [116]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10

Study	Item number														Total score (out of 14)
	1	2	3	6	7	10	12	15	16	18	20	22	23	25	
Dal Pupo et al. [209]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Daneshfar et al. [210]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Dardouri et al. [211]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
de Andrade et al. [212]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Delextrat et al. [213]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Delextrat et al. [214]	1	1	1	1	1	1	1	0	1	1	1	0	0	1	11
Delextrat et al. [175]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Dellal et al. [61]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Dellal & Wong [100]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Dent et al. [131]	1	1	0	1	1	0	0	0	1	1	1	0	0	1	8
Donghi et al. [215]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Doyle et al. [216]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Dupont et al. [217]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Dupont et al. [86]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	10
Eliakim et al. [124]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Elias et al. [218]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Elias et al. [219]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Eniseler et al. [220]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Eryilmaz & Kaynak [221]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Eryilmaz et al. [37]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Essid et al. [222]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Farjallah et al. [223]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Figueira et al. [119]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Fornasier-Santos et al. [224]	1	1	1	1	1	0	0	1	1	1	1	0	1	0	10
Fort-Vanmeerhaeghe et al. [225]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Fortin & Billaut [226]	1	1	1	1	1	0	0	1	1	1	1	0	0	1	10
Freitas et al. [227]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Gabbett [228]	1	1	0	1	1	1	0	0	1	1	1	0	0	0	9
Gabbett et al. [89]	1	1	0	1	1	1	0	0	1	1	1	0	0	0	8
Gabbett et al. [229]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Gabbett et al. [230]	1	1	0	1	1	1	0	0	1	1	1	0	0	0	9
Galvin et al. [231]	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12
Galy et al. [177]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Gantois et al. [232]	1	1	0	1	1	0	0	0	1	1	1	0	0	0	7
Gantois et al. [14]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Gantois et al. [233]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
García-Unanue et al. [169]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Gatterer et al. [234]	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12
Gharbi et al. [83]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Gharbi et al. [235]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Gibson et al. [101]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10
Girard et al. [236]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Girard et al. [149]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
González-Frutos et al. [237]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Gonzalo-skok et al. [102]	1	1	1	1	1	0	0	0	1	1	1	0	1	1	10
Goodall et al. [238]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Hamlin et al. [239]	0	1	1	1	1	0	0	0	1	1	1	0	1	1	9
Hamlin et al. [240]	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11
Hammami et al. [241]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Haugen et al. [62]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Haugen et al. [128]	1	1	1	1	1	0	0	0	1	1	1	0	1	1	10
Hermassi et al. [242]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Higham et al. [90]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Hollville et al. [243]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Howatson et al. [35]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9

Study	Item number														Total score (out of 14)
	1	2	3	6	7	10	12	15	16	18	20	22	23	25	
Iaia et al. [120]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Iaia et al. [19]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Impellizzeri et al. [170]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Ingebrigtsen et al. [244]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Ingebrigtsen et al. [171]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Iacono et al. [42]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10
Izquierdo et al. [140]	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11
Jang & Joo [245]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Jiménez-Reyes et al. [246]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Johnston & Gabbett [40]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Joo [110]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Jorge et al. [247]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Kaplan [109]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Keir et al. [25]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Keogh et al. [172]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Kilduff et al. [248]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Klatt et al. [36]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Krakan et al. [249]	1	1	0	1	1	1	0	0	1	1	1	0	0	0	8
Krueger et al. [250]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Lakomy et al. [78]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Lapointe et al. [251]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11
Le Rossignol et al. [173]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Little & Williams [121]	1	1	0	1	1	0	0	0	1	1	1	0	0	0	7
Lockie et al. [252]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Lockie et al. [253]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Lockie et al. [254]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Lombard et al. [255]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Madueno et al. [24]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Maggioni et al. [16]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10
Mancha-Triguero et al. [139]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9
Marcelino et al. [256]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Matzenbacher et al. [257]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
McGawley & Andersson [258]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Meckel et al. [259]	1	1	0	1	1	0	0	0	1	1	1	0	0	1	8
Meckel et al. [260]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Meckel et al. [261]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Meckel et al. [262]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Meckel et al. [263]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Michalsik et al. [264]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Mohr et al. [265]	1	1	1	1	1	0	0	0	1	1	1	0	1	1	10
Mohr et al. [266]	1	1	1	1	1	0	0	0	1	1	1	0	1	1	10
Mohr et al. [267]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Moncef et al. [268]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Morcillo et al. [48]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Moreira et al. [269]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8
Mujika et al. [164]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Müller et al. [270]	1	1	0	1	1	1	0	0	1	1	1	0	0	0	8
Okuno et al. [271]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9
Nakamura et al. [272]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Nascimento et al [273]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10
Nedrehagen & Saeterbakken [274]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10
Nikolaidis et al. [275]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Padulo et al. [276]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Padulo et al. [277]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10
Padulo et al. [114]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10

Study	Item number															Total score (out of 14)
	1	2	3	6	7	10	12	15	16	18	20	22	23	25		
Padulo et al [156]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Padulo et al. [150]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Paulauskas et al. [122]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9	
Perroni et al. [103]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Petisco et al. [278]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9	
Purkhús et al. [279]	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9	
Pyne et al. [280]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8	
Ramírez-Campillo et al. [281]	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11	
Rampinini et al. [282]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9	
Rampinini et al. [174]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Rey et al. [283]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Rodríguez-Fernández et al. [165]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9	
Rodríguez-Fernández et al. [284]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8	
Røksund et al. [285]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Ruscello et al. [286]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Ruscello et al. [104]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Russell et al. [123]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Salleh et al. [287]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Sánchez-Sánchez et al. [117]	1	1	1	1	1	0	0	0	1	1	1	0	0	1	9	
Sánchez-Sánchez et al. [288]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Sánchez-Sánchez et al. [289]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Sanders et al. [290]	1	1	1	1	1	1	0	0	1	1	0	0	0	0	8	
Scanlan et al. [291]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Scanlan et al. [292]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Selmi et al. [58]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Selmi et al. [293]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Shalfawi et al. [294]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8	
Shalfawi et al. [295]	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9	
Shalfawi et al. [296]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	
Silva et al. [297]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Soares-Caldeira et al. [298]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	
Spinetti et al. [299]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	
Stojanovic et al. [300]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8	
Suarez-Arrones et al. [105]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Taylor et al. [2]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Teixeira et al. [301]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Thomassen et al. [302]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Tønnessen et al. [303]	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	
Torreblanca-Martinez et al. [304]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Tounsi et al. [176]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Trecroci et al. [305]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Turki et al. [111]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Ulupinar et al. [126]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Ulupinar et al. [125]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Van den Tillaar et al. [306]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	
Vasquez-Bonilla et al. [307]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Wadley & Le Rossignol [308]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8	
West et al. [309]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Woolley et al. [33]	1	1	1	1	1	0	0	0	1	1	1	0	0	0	8	
Yanci et al. [310]	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9	
Zagatto et al. [106]	1	1	1	1	1	1	0	0	1	1	1	0	0	1	10	
Zagatto et al. [311]	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	
Zagatto et al. [107]	1	1	1	1	1	1	0	0	1	1	1	0	0	0	9	

Notes: 0 = no; 1 = yes; U = unable to determine. Item 1: clear aim/hypothesis; Item 2: outcome measures clearly described; Item 3: patient characteristics clearly described; Item 6: main findings clearly described; Item 7: measures of random variability provided; Item 10: actual probability values reported; Item 12: participants prepared to participate representative of the entire population; Item 15: blinding of outcome measures; Item 16: analysis completed was planned; Item 18: appropriate statistics; Item 20: valid and reliable outcome measures; Item 22: participants recruited over the same period; Item 23: randomised; Item 25: adjustment made for confounding variables.

Supplementary Table S2. Summary of participant and study characteristics from all included studies.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Abt et al. [118]	11 (NR)	SOC	TRA	NR	NR	NR	NC	CRO (ran)	6 different, time-matched RS protocols (~60 s), performed twice each on an indoor synthetic sports floor, separated by 3–7 days.
AbuMoh'd et al. [180]	18	SOC	NAT	NR	NR	NR	C	PAG (r)	Baseline RS test on an athletics track, before an intervention.
Aguiar et al. [95]	34	SOC	NAT	INT: 27 ± 5 CON: 27 ± 5	INT: 175 ± 5 CON: 175 ± 6	INT: 73 ± 5 CON: 73 ± 7	NC	PAG (r)	RS test before an intervention
Akenhead et al. [57]	9	SOC	NAT	26 ± 3	172 ± 6	71 ± 7	NC	OBS	RS test performed in an indoor sports hall. Test ends when S _{dec} = 5% for 2 consecutive trials.
Alemdaroğlu et al. [23]	9	SOC	TRA	18 ± 1	177 ± 5	74 ± 7	NC	CRO (ran)	4 different RS tests performed twice each on an AG pitch, separated by 48 hrs.
Alizadeh et al. [167]	41	SOC	NAT	High: 17 ± 1 Med: 18 ± 1 Low: 17 ± 1	High: 177 ± 3 Med: 174 ± 5 Low: 171 ± 5	High: 71 ± 4 Med: 66 ± 5 Low: 67 ± 5	NC	OBS	Single RS test. Results according to the criterion of VO _{2max}
Almansba et al. [96]	17	SOC	NAT	16 ± 0	175 ± 1	67 ± 9	NC	CRO (ran)	2 RS tests performed on AG, separated by 72 hrs.
Altimari et al. [181]	46	SOC	NAT	18 ± 0	174 ± 5	64 ± 4	NC	OBS	RS test on a SOC field. U17 group only, birth tertiles combined.
Archiza et al. [182]	18 (0%)	SOC	NAT	Sham: 20 ± 2 INT: 22 ± 4	Sham: 160 ± 0 INT: 160 ± 0	Sham: 55 ± 5 INT: 56 ± 6	C	PAG (r)	Baseline RS test on a grass field, before an intervention.
Attene et al. [115]	36 (39%)	BB	NAT	M: 16 ± 1; F: 16 ± 1	M: 178 ± 1 F: 165 ± 1	M: 66 ± 6 F: 56 ± 7	NC	PAG (r)	2 different baseline RS tests on an indoor court, as part of a testing battery, before a RST intervention.
Ayarra et al. [183]	40	FUT	TRA	22 ± 5	176 ± 7	70 ± 10	NC	OBS	Single RS test on an indoor wooden surface.
Aziz et al. [184]	40	MIX	INTL	23 ± 4	173 ± 1	64 ± 6	NC	OBS	RS test on NG, as part of a testing battery.
Baldi et al. [185]	26	SOC	NAT	23 ± 4	178 ± 6	72 ± 8	NC	OBS	RS test on outdoor NG, as part of a testing battery.
Balsalobre-Fernández et al. [186]	11	BB	NAT	25 ± 6	200 ± 11	99 ± 9	NC	OBS	RS test in an indoor hall.
Beato et al. [187]	36	SOC	TRA	21 ± 2	179 ± 7	74 ± 7	NC	PAG (r)	Baseline RS test before an intervention and RS training data

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Beato et al. [188]	20	SOC	NAT	18–21	177 ± 6	71 ± 7	NC	PAG (r)	Baseline RS test before an intervention and RS training data
Beato & Drust [162]	16	SOC	TRA	21 ± 1	179 ± 8	71 ± 8	NC	CRO (ran)	RS test on a synthetic outdoor track. Sub-maximal RS test excluded from the review.
Beaven et al. [189]	12	RUG	NAT	22 ± 1	185 ± 4	96 ± 9	C	CRO (ran)	RS test on an indoor running track.
Binnie et al. [190]	24 (0%)	HOC	NR	SAN: 19 ± 7 GRA: 21 ± 4	SAN: 168 ± 12 GRA: 167 ± 67	SAN: 66 ± 9 GRA: 63 ± 6	NC	PAG (r)	Baseline RS test in a gymnasium, before an intervention. Participant's pair-matched by VO _{2max} .
Binnie et al. [191]	10 (70%)	HOC/ NET	NAT	M: 23 ± 3 F: 20 ± 3	M: 182 ± 5 F: 176 ± 11	M: 83 ± 6 F: 69 ± 15	NC	CRO (ran)	Baseline RS test in a gymnasium.
Binnie et al. [192]	10 (80%)	HOC/ NET	NR	M: 22 ± 2 F: 21 ± 1	M: 181 ± 5 F: 179 ± 14	M: 78 ± 6 F: 74 ± 18	NC	CRO (ran)	Baseline RS test in a gymnasium
Blasco-Lafarga et al. [108]	13	SOC	NAT	18 ± 1	172 ± 4	68 ± 6	NC	CRO	RS test on a SOC pitch.
Borges et al. [193]	20	SOC	NAT	17 ± 1	175 ± 7	69 ± 9	NC	PAG (r)	Baseline RS test before an intervention.
Brahim et al. [97]	27	SOC	NAT	DEF: 18 ± 1 MID: 18 ± 1 FWD: 17 ± 1	DEF: 183 ± 6 MID: 178 ± 5 FWD: 180 ± 5	DEF: 75 ± 9 MID: 70 ± 7 FWD: 72 ± 4	NC	OBS	3 different RS tests on NG, separated by > 1 day.
Brini et al. [154]	16	BB	NR	23 ± 3	186 ± 10	78 ± 8	NC	CRO (ran)	4 different RS protocols, separated by 48-hrs.
Brini et al. [98]	16	BB	NAT	22 ± 3	186 ± 10	78 ± 8	C	PAG (r)	RS test before an intervention.
Brini et al. [194]	16	BB	NR	23 ± 2	186 ± 9	78 ± 11	C	PAG (r)	RS test before an intervention.
Brini et al. [195]	16	BB	NAT	23 ± 2	186 ± 10	78 ± 8	NC	CRO (ran)	2 different RS tests on a BB court, separated by > 48-hrs.
Brini et al. [46]	40	BB	NAT	27 ± 3	192 ± 9	88 ± 9	NC	OBS	RS test on a wooden BB court.
Brocherie et al. [196]	16	SOC	INTL	27 ± 4	177 ± 4	72 ± 5	NC	OBS	RS test on indoor AG, as part of a testing battery.
Brocherie et al. [54]	8	SOC	INTL	28 ± 5	176 ± 4	72 ± 3	NC	OBS	RS test on indoor AG.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Brocherie et al. [197]	36	HOC	NAT	25 ± 5	178 ± 6	76 ± 8	C	PAG (r)	Baseline RS test on an indoor synthetic floor, before an intervention.
Broderick et al. [141]	19	MIX	TRA	21.0 ± 2.0	178.8 ± 7.2	8.1 ± 8.9	C	CRO (ran)	RS tests in an indoor gymnasium, separated by 7 days.
Buchheit [198]	27	MIX	NAT	HB: 23 ± 3 TS3: 23 ± 4	HB: 188 ± 7 TS3: 180 ± 8	HB: 88 ± 11 TS3: 77 ± 9	NC	OBS	RS tests were performed by different groups of athletes on an indoor synthetic track.
Buchheit et al. [59]	13	MIX	NR	22 ± 3	179 ± 5	75 ± 5	NC	CRO (ran)	4 different RS protocols on an indoor synthetic track, separated by > 48-hrs.
Buchheit et al. [60]	13	MIX	NR	22 ± 3	179 ± 5	75 ± 5	NC	CRO (ran)	2 different RS protocols on an indoor synthetic track, separated by > 48-hrs.
Buchheit et al. [99]	12	MIX	NAT	22 ± 2	178 ± 8	76 ± 4	NC	CRO (ran)	4 different RS protocols on an indoor synthetic track, separated by > 48-hrs.
Campa et al. [168]	36	SOC	NAT	17 ± 1	EL: 177 ± 6 S-EL: 178 ± 6	EL: 69 ± 4 S-EL: 70 ± 7	NC	OBS	RS test on NG.
Campos et al. [199]	11	FUT	NAT	19 ± 1	178 ± 7	71 ± 6	NC	PAG	Baseline RS test on an indoor FUT court before an intervention.
Campos-Vazquez et al. [200]	21	SOC	NAT	18 ± 1	177 ± 6	70 ± 7	NC	PAG (r)	Baseline RS test on AG, before an intervention.
Caprino et al. [201]	10	BB	TRA	16 ± 1	184 ± 7	77 ± 8	NC	OBS	RS test before an official BB match.
Castagna et al. [153]	16	BB	TRA	17 ± 1	181 ± 6	73 ± 10	NC	OBS (ran)	2 different RS tests on an indoor wooden BB court, separated by > 48-hrs, as part of a testing battery.
Castagna et al. [202]	18	BB	TRA	17 ± 1	181 ± 6	73 ± 10	NC	OBS	RS test on an indoor wooden BB court, separated by > 48-hrs.
Chaouachi et al. [203]	23	SOC	NAT	19 ± 1	181 ± 6	73 ± 4	NC	CRO (ran)	RS test on an indoor synthetic track.
Charlot et al. [204]	10	FUT	NAT	26 ± 4	170 ± 7	70 ± 9	NC	OBS*	RS test before a FUT tournament
Chen et al. [205]	26	SOC	NAT	21 ± 1	173 ± 4	65 ± 5	C	PAG (r)	RS test on an indoor synthetic surface.
Clifford et al. [34]	20	MIX	NAT	CON: 21 ± 2 INT: 23 ± 3	CON: 177 ± 1 INT: 183 ± 1	CON: 73 ± 12 INT: 77 ± 10	C	PAG (r)	Baseline RS test before an intervention period.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Corrêa et al. [206]	10	SOC	TRA	19 ± 1	179 ± 0	71 ± 7	NC	OBS*	Baseline RS test on outdoor NG.
Costello et al. [127]	24	RUG	NAT	21 ± 2	182 ± 5	88 ± 9	C	CRO (ran)	RS protocol (session 1 & day 1 only)
Cuadrado-Peñafiel et al. [207]	37	SOC/ FUT	NAT	SOC: 29 ± 1 FUT: 27 ± 5	SOC: 178 ± 1 FUT: 179 ± 1	SOC: 73 ± 12 FUT: 75 ± 7	NC	OBS	Single RS test
Da Silva et al. [208]	29	SOC	NAT	18 ± 1	179 ± 5	74 ± 7	NC	OBS	Single RS test.
Dal Pupo [116]	14	FUT	TRA	U17	170 ± 6	63 ± 8	NC	OBS (ran)	2 different RS tests on a FUT court, separated by 48-hrs.
Dal Pupo et al. [209]	7	FUT	TRA	16 ± 1	172 ± 9	65 ± 8	NC	OBS (ran)	2 different RS tests on a concrete floor, separated by 48-hrs.
Daneshfar et al. [210]	20	HB	INTL	16 ± 1	185 ± 5	83 ± 6	NC	OBS (ran)	2 different RS tests were performed indoors, separated by 48-hrs, as part of a testing battery.
Dardouri et al. [211]	29	MIX	NR	23 ± 2	180 ± 10	69 ± 9	NC	OBS	RS test, indoors, as part of a testing battery.
de Andrade et al. [212]	16	MIX	NAT	22 ± 3	186 ± 10	79 ± 23	NC	OBS	Single RS test on an indoor rigid surface.
Delextrat et al. [213]	17 (53%)	BB	TRA	M: 22 ± 3 F: 21 ± 3	M: 19 ± 9 F: 176 ± 8	M: 91 ± 10 F: 74 ± 10	C	CRO (ran) (r)	Baseline RS test, before an intervention.
Delextrat et al. [214]	31	BB	TRA	FWD: 16 ± 1 G: 17 ± 1 CEN: 16 ± 1	FWD: 183 ± 5 G: 175 ± 6 CEN: 191 ± 8	FWD: 75 ± 7 G: 69 ± 5 CEN: 81 ± 3	NC	OBS (ran)	RS test, as part of a testing battery.
Delextrat et al. [175]	16 (50%)	BB	TRA	M: 23 ± 3 F: 22 ± 2	M: 191 ± 9 F: 179 ± 9	M: 90 ± 10 F: 78 ± 9	C	PAG (ran) (r)	Baseline RS test, before an intervention.
Dellal et al. [61]	22	SOC	INTL	24 ± 4	178 ± 6	80 ± 6	NC	OBS	3 different RS protocols performed indoors, separated by > 48-hrs, as part of a testing battery.
Dellal & Wong [100]	39	SOC	NAT	Open age to U17	PRO: 180 ± 4 U19: 178 ± 7 U17: 180 ± 6	PRO: 72 ± 4 U19: 69 ± 6 U17: 67 ± 5	NC	OBS	2 different RS tests on AG, separated by 1 week.
Dent et al. [131]	15 (47%)	SOC	TRA	M: 20 ± 2 F: 19 ± 2	NR	M: 79 ± 11 F: 62 ± 7	NC	CRO	Single RS protocol.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Donghi et al. [215]	12	SOC	NAT	17 ± 1	178 ± 6	69 ± 4	C	CRO (ran)	Baseline RS test in an indoor gym,
Doyle et al. [216]	25 (0%)	SOC	INTL	19 ± 3	167 ± 6	63 ± 7	NC	OBS	RS test performed on an indoor surface.
Dupont et al. [217]	12	SOC	TRA	23 ± 4	179 ± 6	72 ± 7	NC	OBS	RS test on an indoor tartan track.
Dupont et al. [86]	11	SOC	TRA	25 ± 4	176 ± 6	68 ± 4	NC	OBS	RS test on an indoor tartan track.
Eliakim et al. [124]	12	BB	NAT	16 ± 1	186 ± 10	76 ± 6	C	CRO (ran)	RS test on a BB court, CON condition only.
Elias et al. [218]	14	ARF	NAT	21 ± 3	186 ± 7	80 ± 7	NC	CRO (ran)	Baseline RS test on an indoor, wooden surface.
Elias et al. [219]	24	ARF	NAT	20 ± 3	186 ± 6	81 ± 8	NC	PAG (r)	Baseline RS test on an indoor wooden sprung floor, before an intervention.
Eniseler et al. [220]	19	SOC	NAT	17 ± 1	174 ± 5	66 ± 6	C	PAG (r)	Baseline RS test on NG before an intervention
Eryilmaz & Kaynak [221]	16	VB	TRA	21 ± 1	184 ± 5	74 ± 8	NC	OBS	RS test on an indoor VB court.
Eryilmaz et al. [37]	12	MIX	TRA	24 ± 4	179 ± 6	73 ± 9	NC	SG	Data extracted from one session during a RST intervention.
Essid et al. [222]	18	HB	NAT	17 ± 0.3	190 ± 10	78 ± 10	NC	CRO (ran)	RS test (morning session only)
Farjallah et al. [223]	20	SOC	NAT	19 ± 1	180 ± 10	70 ± 11	C	PAG	RS test on a SOC field, before an intervention.
Figueira et al. [119]	12	BB	NAT	21 ± 2	190 ± 7	86 ± 6	NC	CRO (ran)	2 different RS tests.
Fornasier-Santos et al. [224]	35	RUG	NAT	18 ± 1	182 ± 7	95 ± 15	C	PAG (r)	Baseline RS test on an indoor, concrete floor and RS training data from the control group.
Fort-Vanmeerhaeghe et al. [225]	11	HB (0%)	NAT	17 ± 1	182 ± 7	70 ± 8	NC	OBS	RS test on a BB court
Fortin & Billaut [226]	15	AF	TRA	21 ± 2	188 ± 19	82 ± 3	NC	PAG	Baseline RS test before an intervention.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Freitas et al. [227]	9	BB	NAT	21 ± 3	198 ± 8	93 ± 15	NC	CRO (r)	Baseline RS test in an indoor centre.
Gabbett [228]	19 (0%)	SOC	NAT / INTL	18 ± 3	NR	NR	NC	OBS	Same RS test, repeated twice.
Gabbett et al. [89]	58	RUG	NAT	24 ± 4	184 ± 6	97 ± 10	NC	OBS	RS test on a synthetic surface, as part of a testing battery.
Gabbett et al. [229]	86	RUG	NAT	ST: 25 ± 4 N-ST: 23 ± 4 N-SEL: 22 ± 4	ST: 185 ± 5 N-ST: 182 ± 6 N-SEL: 183 ± 7	ST: 96 ± 8 N-ST: 99 ± 12 N-SEL: 96 ± 11	NC	OBS	RS test on a synthetic surface, as part of a testing battery.
Gabbett et al. [230]	16 (0%)	SOC	NAT / INTL	18.3 ± 2.8	NR	NR	NC	PAG	Baseline RS test, before an intervention.
Galvin et al. [231]	42	RUG	NAT	18 ± 2	183 ± 7	88 ± 9	C	PAG (r)	RS test performed outdoors, before an intervention.
Galy et al. [177]	22	FUT	INTL	MG: 24 ± 4 N-MG: 23 ± 5	MG: 173 ± 5 N-MG: 180 ± 8	MG: 72 ± 7 N-MG: 74 ± 12	NC	OBS	RS test on an indoor synthetic court, as part of a testing battery.
Gantois et al. [232]	20	BB	NAT	18-24	180 ± 6	81 ± 13	NC	OBS	RS test on a BB court.
Gantois et al. [14]	20	BB	NAT	21 ± 2	181 ± 8	74 ± 9	C	PAG (r)	RS test on a BB court, before an intervention.
Gantois et al. [233]	12	BB	NAT	22 ± 3	180 ± 2	81 ± 14	NC	SG	Baseline RS test, before an intervention.
García-Unanue et al. [169]	33	FUT	NAT / TRA	23 ± 4	176 ± 6	73 ± 6	NC	OBS	RS test on a FUT field. Results according to playing level.
Gatterer et al. [234]	14	SOC	TRA	24 ± 2	178 ± 7	77 ± 7	C	PAG	Baseline RS test, before an intervention.
Gharbi et al. [83]	20	MIX	TRA	22 ± 3	178 ± 7	71 ± 8	NC	CRO (ran)	Series of RS protocols on an indoor synthetic surface, separated by >24 hrs.
Gharbi et al. [235]	16	MIX	TRA	23 ± 2	178 ± 4	72 ± 3	C	OBS (ran)	RS test on an indoor synthetic surface
Gibson et al. [101]	32	SOC	TRA	18 ± 1	179 ± 5	177 ± 5	NC	OBS	RS test on an indoor synthetic surface

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Girard et al. [236]	12	SOC	INTL	28 ± 5	176 ± 4	64 ± 5	NC	OBS	RS test on indoor AG, wearing normal football boots with plantar pressure insoles inserted.
Girard et al. [149]	13	SOC	NAT	18 ± 1	190 ± 10	83 ± 10	NC	OBS	RS test on indoor AG, wearing normal football boots with plantar pressure insoles inserted.
González-Frutos et al. [237]	13 (0%)	HOC	INTL	25 ± 6	167 ± 4	59 ± 4	NC	OBS	Single RS test
Gonzalo-skok et al. [102]	22	BB	NAT	16 ± 1	180 ± 6	81 ± 13	C	PAG (r)	2 different RS tests were performed on an indoor BB court, as part of a testing battery, before an intervention.
Goodall et al. [238]	12	MIX	NR	25 ± 6	180 ± 7	77 ± 7	NC	OBS	Single RS protocol.
Hamlin et al. [239]	20 (85%)	RUG	NAT	19 ± 1	180 ± 10	85 ± 14	NC	CRO (r)	Baseline RS protocol, before an intervention.
Hamlin et al. [240]	19	RUG	TRA	CON: 22 ± 4 INT: 20 ± 2	CON: 178 ± 5 INT: 174 ± 5	CON: 88 ± 14 INT: 77 ± 10	C	PAG (r)	Baseline RS test in an indoor stadium, on 2 separate occasions, 4–5 days apart.
Hammami et al. [241]	28	HB	NAT	INT: 17 ± 0 CON: 17 ± 0	INT: 163 ± 4 CON: 164 ± 4	INT: 61 ± 5 CON: 60 ± 4	C	PAG (r)	Baseline RS test before an intervention
Haugen et al. [62]	25 (52%)	SOC	TRA	INT: 17 ± 1 CON: 17 ± 1	INT: 174 ± 8 CON: 173 ± 6	INT: 65 ± 8 CON: 62 ± 7	C	PAG (r)	Baseline RS test before an intervention
Haugen et al. [128]	42	SOC	TRA	17 ± 1	178 ± 6	66 ± 9	C	PAG (r)	Baseline RS test before an intervention
Hermassi et al. [242]	22	HB	NAT	19 ± 0	179 ± 2	83 ± 1	NC	OBS (ran)	2 different RS tests, separated by 3–7 days, as part of a testing battery.
Higham et al. [90]	18	RUG	INTL	22 ± 2	183 ± 6	90 ± 8	NC	OBS	RS test on an indoor synthetic track, as part of a testing battery.
Hollville et al. [243]	10	HOC	NAT	19 ± 1	180 ± 6	72 ± 5	NC	OBS	RS test on AG. Results from the 1 st set only.
Howatson et al. [35]	20	MIX	NAT	22 ± 2	178 ± 7	85 ± 14	NC	OBS	Single RS protocol performed on an outdoor track.
Iaia et al. [120]	18	SOC	NAT	19 ± 1	180 ± 7	74 ± 7	NC	PAG (r)	Baseline RS test on AG, as part of a testing battery, performed by 2 different groups.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Iaia et al. [19]	29	SOC	NAT	17 ± 1	178 ± 10	69 ± 8	C	PAG (r)	Data extracted from baseline RS tests on AG and the 1 st RS training session of an intervention.
Impellizzeri et al. [170]	22	SOC	NAT	22 ± 1	177 ± 4	73 ± 5	NC	OBS	Same RS test on NG, performed twice on different occasions
Impellizzeri et al. [170]	30	SOC	NAT	25 ± 5	181 ± 5	78 ± 8	NC	OBS*	RS test on NG, performed at different timepoints across a regular season.
Impellizzeri et al. [170]	108	SOC	NAT / TRA	24 ± 4	75 ± 7	179 ± 5	NC	OBS*	RS test on NG. Results according to player level.
Ingebrigtsen et al. [244]	57	SOC	NAT	22 ± 5	181 ± 5	75.2 ± 7.6	NC	OBS	RS test on indoor AG, as part of a testing battery
Ingebrigtsen et al. [171]	51	SOC	NAT	PRO: 26 ± 7 SEMI: 20 ± 3	PRO: 183 ± 5 SEMI: 181 ± 5	NR	NC	OBS	RS test. Results according to player level.
Iacono et al. [42]	18	HB	NAT	25 ± 4	188 ± 7	91 ± 9	NC	PAG (r)	RS test on an indoor court before an intervention
Izquierdo et al. [140]	19	HB	NAT	INT: 21 ± 5 PLA: 24 ± 5	INT: 182 ± 8 PLA: 190 ± 8	INT: 79 ± 8 PLA: 87 ± 12	C	PAG (r)	Baseline RS test on an indoor HB court, before an intervention.
Jang & Joo [245]	12	SOC	NAT	23 ± 2	175 ± 6	71 ± 5	NC	CRO (r)	Single RS test.
Jiménez-Reyes et al. [246]	20	RUG	INTL	24 ± 4	188 ± 5	96 ± 7	NC	OBS	RS test on an indoor synthetic athletics track.
Johnston & Gabbett [40]	12	RUG	NR	23 ± 2	179 ± 10	85 ± 11	NC	CRO (ran)	The same RS test was performed twice on different occasions.
Joo [140]	11	SOC	TRA	22 ± 2	174 ± 6	NR	NC	SG	Baseline RS test before an intervention.
Jorge et al. [247]	43	SOC	NAT	18 ± 1	178 ± 8	74 ± 10	NC	OBS*	RS test on NG, performed at different timepoints across a season.
Kaplan [109]	85	SOC	TRA	21 ± 3.8	176 ± 6	69 ± 7	NC	OBS	RS test on NG as part of a testing battery.
Keir et al. [25]	8	SOC	NAT	21 ± 2	176 ± 5	75 ± 4	NC	OBS (ran)	Single RS test.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Keogh [172]	74 (0%)	HOC	TRA	REP: 19 ± 1 Club: 20 ± 2	REP: 165 ± 1 Club: 164 ± 1	REP: 59 ± 1 Club: 57 ± 1	NC	OBS	RS test as part of a testing battery
Kilduff et al. [248]	20	RUG	NAT	26 ± 2	185 ± 4	96 ± 8	C	CRO (ran)	Baseline RS test on an indoor synthetic track, before an intervention.
Klatt et al. [36]	29	HB	NAT	U20: 18 ± 1 SEN: 27 ± 6	U20: 182 ± 8 SEN: 192 ± 9	U20: 79 ± 9 SEN 90 ± 14	NC	OBS*	Single RS protocol
Krakan et al. [249]	41 (NR)	MIX	TRA	NR	RS-G, 181 ± 7 PLY, 175 ± 6	RS-G, 81 ± 8 PLY, 77 ± 9	NC	PAG	RS test before an intervention
Krueger et al. [250]	18	HOC	INTL	17 ± 1	182 ± 6	74 ± 8	C	PAG (r)	Baseline RS test, before an intervention.
Lakomy et al. [78]	18	HOC	NAT	24 ± 4	179 ± 5	77 ± 4	C	CRO (ran) (r)	2 different RS protocols on AG
Lapointe et al. [251]	17 (71%)	BB	NAT	22	186 ± 12	89 ± 17	C	PAG (r)	Baseline RS test before an intervention.
Le Rossignol et al. [173]	20	ARF	NAT	22 ± 2	188 ± 6	88 ± 8	NC	OBS	RS test on an outdoor synthetic track, as part of a testing battery
Little & Williams [121]	6	SOC	NAT	18–27	NR	NR	NC	CRO (ran)	4 different RS protocols, performed on non-consecutive days.
Lockie et al. [252]	17	SOC	INTL	20 ± 2	181 ± 6	78 ± 7	NC	OBS	RS test on outdoor NG, as part of a testing battery.
Lockie et al. [253]	19 (0%)	SOC	INTL	20 ± 1	164 ± 6	61 ± 8	NC	OBS	RS test on outdoor NG, as part of a testing battery.
Lockie et al. [254]	18	SOC	INTL	21 ± 2	181 ± 6	78 ± 6	NC	OBS	RS test on outdoor NG, as part of a testing battery. Results are for all players.
Lombard et al. [255]	23	HOC	NAT / INTL	24 ± 3	178 ± 3	77 ± 5	NC	OBS	RS test on AG, as part of a testing battery. Results are for all players.
Madueno et al. [24]	8 (75%)	BB	NAT	20 ± 2	183 ± 10	78 ± 17	NC	CRO (ran)	2 different RS protocols on an indoor hardwood floor, separated by 2–7 days.
Maggioni et al. [16]	36	BB	NAT	19 ± 1	182 ± 7	74 ± 10	C	PAG (r)	RS training data from an intervention.
Mancha-Triguero et al. [139]	61	BB	NAT	U18	M: 195 F: 168	M: 85 F: 57	NC	OBS	RS test on BB court.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Marcelino et al. [256]	12	BB	TRA	19 ± 1	193 ± 7	89 ± 15	NC	CRO	Same 2 baseline RS tests, separated by 24-hrs, before an intervention.
Matzenbacher et al. [152]	9	FUT	TRA	17 ± 0	176 ± 7	68 ± 9	NC	OBS *	RS test performed at the beginning and end of the season.
McGawley & Andersson [258]	18	SOC	NAT	23 ± 4	180 ± 8	76 ± 6	NC	PAG	Baseline RS test on AG, before an intervention.
Meckel et al. [259]	18	SOC	NAT	22-32	NR	77 ± 8	NC	OBS *	RS test performed at different timepoints across a season.
Meckel et al. [260]	12	BB	NAT	17 ± 1	187 ± 9	78 ± 6	NC	CRO (ran)	RS test on a BB court, after a game day warm-up.
Meckel et al. [261]	33	SOC	NAT	16-18	175 ± 4	67 ± 7	NC	OBS (ran)	2 different RS tests on NG, separated by ~1 week, as part of a testing battery.
Meckel et al. [262]	16	VB	NAT	26 ± 5	192 ± 6	84 ± 7	NC	OBS (ran)	RS test in a sports arena, as part of a testing battery.
Meckel et al. [263]	20	SOC	NAT	17 ± 1	174 ± 7	67 ± 7	NC	CRO (ran)	RS test on a SOC pitch, after a match warm up.
Michalsik et al. [264]	26	HB	INTL	26 ± 3	189 ± 6	91 ± 9	NC	OBS	RS test on an indoor HB court. Results are all players combined.
Mohr et al. [265]	40	SOC	NAT	22 ± 0	177 ± 1	73 ± 1	C	PAG (r)	Baseline RS test on NG, before an intervention.
Mohr et al. [266]	18	SOC	TRA	19 ± 1	179 ± 6	79 ± 4	NC	PAG (r)	Baseline RS test on AG, before an intervention.
Mohr et al. [267]	17	SOC	NAT	27 ± 1	184 ± 1	80 ± 2	C	CRO	Baseline RS test on indoor AG, before an intervention.
Moncef et al. [268]	44	HB	NAT	22 ± 3	182 ± 6	85 ± 2	NC	OBS	RS test, as part of a testing battery.
Morcillo et al. [48]	18	SOC	NAT	27 ± 4	180 ± 5	78 ± 5	NC	OBS	Single RS test.
Moreira et al. [269]	10	FUT	NAT	24 ± 3	174 ± 5	73 ± 9	C	CRO (ran)	Baseline RS test before an intervention.
Mujika et al. [164]	28	SOC	TRA	U17 & U18	U17: 178 ± 6 U18: 179 ± 9	U17: 70 ± 7 U18: 72 ± 8	NC	OBS	RS test on indoor AG.
Müller et al. [270]	12	RUG	TRA	25 ± 4	177 ± 5	92 ± 12	NC	CRO (ran)	Single RS test.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Nakamura et al. [272]	13	HB	NAT	24 ± 4	187 ± 7	88 ± 3	NC	OBS	RS test in a gymnasium.
Nascimento et al. [273]	18	FUT	TRA	17 ± 1	177 ± 5	69 ± 7	C	PAG (r)	Baseline RS test before a long-term RS intervention.
Nedrehagen & Saeterbakken [274]	22 (41%)	SOC	TRA	INT: 20 ± 3 CON: 22 ± 3	INT: 20 ± 3 CON: 22 ± 3	69 ± 10	C	PAG (r)	Baseline RS test on indoor AG before an intervention
Nikolaidis et al. [275]	36	SOC	TRA	22 ± 5	180 ± 6	75 ± 8	NC	OBS	RS test on AG, as part of a testing battery.
Okuno et al. [271]	12	HB	NAT	19 ± 2	185 ± 87	85 ± 10	NC	CRO	Single RS test
Padulo et al. [276]	18	SOC	NAT	16 ± 0	174 ± 10	65 ± 10	NC	CRO (ran)	Same RS test, repeated twice, on AG, separated by > 6 days.
Padulo et al. [277]	17	SOC	NAT	17 ± 1	179 ± 5	69 ± 7	NC	CRO (ran)	Same 2 RS tests and 1 different RS test on AG, separated by 3 days.
Padulo et al. [114]	18	BB	NAT	16 ± 1	178 ± 10	66 ± 9	NC	CRO	2 different RS tests on an indoor BB court, repeated twice, separated by > 48-hrs, as part of a testing battery.
Padulo et al. [156]	18	SOC	NAT	16 ± 0	174 ± 10	65 ± 10	NC	CRO	The same RS test was repeated twice, and 1 different RS test, on AG, separated by 1-week.
Padulo et al. [150]	17	SOC	INTL	16 ± 0	181 ± 10	66 ± 10	NC	CRO	3 different RS tests on AG, separated by 5 days.
Paulauskas et al. [122]	12	BB	NAT	21 ± 2	190 ± 7	86 ± 6	NC	CRO (ran)	2 different RS protocols, on an indoor wooden BB court, separated by 1-week.
Perroni et al. [103]	12	SOC	TRA	23 ± 6	177 ± 6	75 ± 7	NC	SG	Baseline RS test on AG, before an intervention.
Petisco et al. [278]	10	SOC	NAT	22 ± 3	178 ± 4	70 ± 3	C	CRO (ran)	RS test following the regular warm-up protocol.
Purkhús et al. [279]	25 (0%)	VB	NAT	18 ± 4	172 ± 7	63 ± 11	C	PAG (r)	Baseline RS test on an indoor HB court, before an intervention.
Pyne et al. [280]	60	ARF	NAT	18 ± 0	188 ± 7	82 ± 8	NC	OBS	RS test on an indoor sprung wooden floor, as part of a testing battery.
Ramírez-Campillo et al. [281]	30 (0%)	SOC	TRA	CON: 23 ± 2 PLA: 23 ± 2 INT: 23 ± 3	CON: 161 ± 6 PLA: 164 ± 9 CR: 162 ± 4	CON: 60 ± 8 PLA: 57 ± 5 INT: 60 ± 8	C	PAG (r)	Baseline RS test, before an intervention.
Rampinini et al. [282]	18	SOC	NAT	26 ± 5	182 ± 4	81 ± 8	NC	OBS	RS test on outdoor NG.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Rampinini et al. [174]	23	SOC	NAT / TRA	PRO: 25 ± 4 AM: 26 ± 6	PRO: 180 ± 3 AM: 177 ± 5	PRO: 74 ± 5 AM: 71 ± 8	NC	OBS	RS test on outdoor NG.
Rey et al. [283]	19	SOC	TRA	INT: 24 ± 3 CON: 24 ± 2	INT: 179 ± 5 CON: 178 ± 5	INT: 74 ± 7 CON: 75 ± 7	C	PAG (r)	Baseline RS test on an indoor court, before an intervention.
Rodríguez-Fernández et al. [165]	33	SOC	NAT	PRO: 24 ± 3 YTH: 18 ± 1	PRO: 180 ± 2 YTH: 174 ± 10	PRO: 75 ± 5 YTH: 65 ± 1	NC	SG	Baseline RS test before an intervention.
Rodríguez-Fernández et al. [284]	24	SOC	TRA	19 ± 2	176 ± 6	67 ± 9	NC	SG	Baseline RS test before an intervention
Røksund et al. [285]	75	SOC	NAT	19 ± 3	181 ± 6	75 ± 10	NC	OBS	Single RS test as part of a testing battery.
Ruscello et al. [286]	15 (0%)	SOC	NAT	23 ± 6	165 ± 6	59 ± 9	NC	CRO (r)	2 different RS tests on AG, separated by > 48-hrs.
Ruscello et al. [104]	17	SOC	NAT	22 ± 4	177 ± 6	72 ± 10	NC	CRO (r)	2 different RS tests on AG, separated by > 48-hrs.
Russell et al. [123]	14	SOC	NAT	18 ± 2	178 ± 5	75 ± 6	NC	CRO (ran)	Baseline RS test before an intervention.
Salleh et al. [287]	24	SOC	TRA	21 ± 2	173 ± 3	65 ± 3	NC	OBS	Single RS test.
Sánchez-Sánchez et al. [117]	18	SOC	TRA	22 ± 2	175 ± 6	74 ± 9	NC	OBS	RS test on 4 different AG pitches, separated by 72 hrs.
Sánchez-Sánchez et al. [288]	21	SOC	NAT	U18	NR	NR	NC	OBS	Single RS test.
Sánchez-Sánchez et al. [289]	16	SOC	NAT / TRA	21 ± 1	69 ± 5	177 ± 5	C	PAG	Baseline RS test before an intervention
Sanders et al. [290]	20 (50%)	SOC	INTL	M: 21 ± 1 F: 20 ± 1	M: 178 ± 7 F: 168 ± 6	M: 75 ± 5 F: 63 ± 5	NC	OBS	Single RS test.
Scanlan et al. [291]	9 (67%)	MIX	TRA	22 ± 4	171 ± 6	73 ± 12	NC	CRO (ran)	Two different RS protocols on an indoor, sprung, hardwood surface.
Scanlan et al. [292]	8 (75%)	BB	TRA	20 ± 1	183 ± 10	78 ± 17	NC	CRO	RS protocol an indoor, hardwood BB court.
Selmi et al. [58]	24	SOC	NAT	17 ± 0	172 ± 9	68 ± 7	NC	CRO (ran)	3 different RS tests on outdoor AG, separated by > 48-hrs.
Selmi et al. [293]	30	SOC	NAT	18 ± 1	178 ± 5	70 ± 7	C	PAG (r)	Baseline RS test before an intervention

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Shalfawi et al. [294]	30 (0%)	SOC	NAT	19 ± 4	167 ± 4	58 ± 7	NC	OBS	RS test in an indoor arena.
Shalfawi et al. [295]	15	SOC	NAT	16 ± 1	179 ± 7	68 ± 9	C	PAG (r)	RS test on indoor AG before an intervention
Shalfawi et al. [296]	17 (0%)	SOC	TRA	21 ± 3	1769 ± 5	64 ± 6	C	PAG (r)	RS test on an indoor Mondo track
Silva et al. [297]	22	SOC	NAT	18 ± 1	175 ± 6	71 ± 5	NC	SG	Baseline RS test before an intervention.
Soares-Caldeira et al. [298]	14	FUT	NAT	INT: 25 ± 8 CON: 21 ± 5	172 ± 6	72 ± 9	C	PAG (r)	RS test on an indoor synthetic floor, before an intervention.
Spinetti et al. [299]	22	SOC	NAT	18 ± 0	180 ± 8	70 ± 9	NC	PAG (r)	RS test before an intervention
Stojanovic et al. [300]	24	BB	NAT	22. ± 3	197 ± 6	96 ± 9	NC	OBS	RS test on a BB court, as part of a testing battery.
Suarez-Arrones et al. [105]	16	RUG	TRA	27 ± 5	180 ± 7	91 ± 16	C	PAG (r)	Data extracted from baseline RS tests (both groups) and training data (RST group).
Taylor et al. [2]	15	SOC	TRA	24 ± 4	179 ± 6	77 ± 8	NC	PAG	Data extracted from a RST intervention.
Teixeira et al. [301]	20 (0%)	FUT	NAT	19 ± 2	162 ± 5	59 ± 8	NC	PAG (r)	Baseline RS test on an indoor FUT court, as part of a testing battery, before a long-term training intervention.
Thomassen et al. [302]	18	SOC	NAT	23 ± 1	182 ± 2	79 ± 2	NC	PAG (r)	Baseline RS test on an indoor wooden surface.
Tønnessen et al. [303]	20	SOC	NAT	16 ± 1	176 ± 7	67 ± 9	C	PAG (r)	Baseline RS test before an intervention.
Torreblanca-Martinez et al.[304]	18 (0%)	SOC	NAT	18 ± 2	162 ± 5	56 ± 7	NC	SG	RS test on outside AG.
Tounsi et al. [176]	33	SOC	NAT	17 ± 0	NR	NR	NC	CRO (ran)	RS test on NG
Trecroci et al. [305]	9	SOC	NAT	17–19	177 ± 2	66 ± 6	NC	CRO (r)	Baseline RS test on NG, before an intervention.
Turki et al. [111]	19	SOC	NR	18 ± 1	175 ± 7	70 ± 8	C	CRO (ran) (r)	Baseline RS test.

Study	Participants						Experimental Approach		
	N [#]	Sport	Level	Age (yrs)	Stature (cm)	Body mass (kg)	Design	Type	Details
Ulupinar et al. [126]	18	SOC	TRA	20 ± 2	178 ± 5	72 ± 6	NC	CRO (ran)	2 different RS protocols on outdoor NG, separated by > 48 hrs
Ulupinar et al. [125]	16	SOC	TRA	19 ± 2	176 ± 5	70 ± 6	NC	CRO (ran)	4 different RS protocols on indoor AG, separated by > 48 hrs
Van den Tillaar et al. [306]	17 (0%)	SOC	NR	17 ± 1	168 ± 5	62 ± 7	NC	OBS	Single RS test on a track.
Vasquez-Bonilla et al. [307]	38 (0%)	SOC	NAT	23 ± 4	165 ± 11	61 ± 7	NC	OBS	Single RST test on an indoor court
Wadley & Le Rossignol [308]	17	ARF	NAT	21 ± 2	182 ± 5	81 ± 10	NC	OBS	RS test on an asphalt surface, as part of a testing battery.
West et al. [309]	15	RUG	NAT	28 ± 3	188 ± 6	99 ± 9	C	CRO (ran)	RS test on an indoor sprint track.
Woolley et al. [33]	10	MIX	NR	27 ± 3	178 ± 6	78 ± 8	NC	CRO (ran)	RS protocol on a non-slip indoor surface
Yanci et al. [310]	39	FUT	TRA	23 ± 5	170 ± 10	69 ± 10	C	PAG (r)	Baseline RS test before an intervention
Zagatto et al. [106]	20	BB	NAT	17 ± 1	191 ± 8	84 ± 12	NC	CRO (ran)	2 different RS tests on an indoor court, separated by 2–4 days.
Zagatto et al. [311]	12	BB	NAT	25 ± 7	200 ± 10	97 ± 9	C	CRO (r)	RS test on a BB court, CON condition only.
Zagatto et al. [107]	10	BB	NAT	17 ± 1	191 ± 7	87 ± 15	C	CRO (ran)	Single RS protocol on a BB court

Data are presented as mean ± standard deviation.

Abbreviations: N[#] = number of participants (unless stated, the proportion of males was 100%). M = male; F = female; NR = not reported; NA = not applicable; OBS = observational design; CRO = crossover design; SG = single group pre-test post-test design; ran = experimental treatment or measurements delivered in a randomised order; r = random assignment of participants to experimental groups; C = controlled study; NC = non-controlled study; PLA = placebo; SOC = soccer, FUT = futsal; RUG = rugby; HOC = field hockey; BB = basketball; AF = American football; ARF = Australian rules football; VB = volleyball; HB = handball; NET = netball; MIX = mixture of team sports; TRA = trained/developmental athletes; INT = international/elite athletes; NAT = national/highly trained athletes; PRO = professional; SEMI = semi-professional; AM = amateur; YTH = youth; CON = control group; INT = intervention group; Sham = sham group; RS = repeated-sprint; RS-G = repeated-sprint group; PLY = plyometric group; REP = representative players; Club = club players; MID = midfielders; FWD = forwards; DEF = defenders; G = guards; CEN = centres; U17 = under 17 players; U18 = under 18 players; U20 = under 20 players; SEN = senior players; VO_{2max} = maximal oxygen consumption; High = high VO_{2max} group; Med = medium VO_{2max} group; Low = low VO_{2max} group; SAN = sand training group; GRA = grass training group; TS3 = team sport 3; ST = starting players; N-ST = non-starting players; N-SEL = non-selected players; MG = Melanesian group; N-MG = Non-Melanesian group; S_{dec} = percentage sprint decrement; yrs = years; hrs = hours; AG = artificial grass; NG = natural grass; cm = centimetre; kg = kilogram; ~ = approximately; * = single group time series.

Supplementary Table S3. Summary of exercise protocol information and outcomes from all studies.

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Abt et al. [118]	STR	1 × 22	15 m	1:10 ^N (~26 s)	A ^H	-	S _{avg} : 2.64 ± 0.06 s	-	-	B[La] _{peak} : 1.3 ± 0.2 to 7.6 ± 0.6 mmol·L ⁻¹
	STR	1 × 22	15 m	1:10 ^N (~26 s)	P	-	S _{avg} : 2.63 ± 0.07 s	-	-	B[La] _{peak} : 1.0 ± 0.1 to 8.7 ± 0.9 mmol·L ⁻¹
	STR	1 × 22	30 m	1:10 ^N (~45 s)	A ^H	-	S _{avg} : 4.57 ± 0.22 s	-	-	B[La] _{peak} : 1.2 ± 0.2 to 10.6 ± 0.7 mmol·L ⁻¹
	STR	1 × 22	30 m	1:10 ^N (~45 s)	P	-	S _{avg} : 4.59 ± 0.15	-	-	B[La] _{peak} : 1.3 ± 0.2 to 11.1 ± 0.8 mmol·L ⁻¹
AbuMoh'd [180]	STR	1 × 7	30 m	30 s	P	-	INT, S _{avg} : 3.71 ± 0.05; PLA, S _{avg} : 3.70 ± 0.05	-	-	INT, B[La] ⁵ : 9.0 ± 0.1 mmol·L ⁻¹ ; PLA, B[La] ⁵ : 9.2 ± 0.2 mmol·L ⁻¹
Akenhead et al. [57]	SHU	1 × 12	25 m (12.5 + 12.5)	20 s	P	-	S _{dec} : 5.3%	-	-	-
Aguiar et al. [95]	MD ^A	1 × 7	34.2 m	25 s	A ^K	-	INT, S _{avg} : 6.69 ± 0.20 s CON, S _{avg} : 7.31 ± 0.34 s	-	-	-
Alemdaroğlu et al. [23]	SHU	1 × 6	40 m	On 25 s (~17 s)	A ^H	-	S _{best} : 7.35 ± 0.17 s; S _{total} : 45.93 ± 0.84 s; S _{dec} : 4.13 ± 1.81%	-	-	B[La] ³ : 9.3 ± 2.5 mmol·L ⁻¹
	STR	1 × 6	40 m	On 25 s (~19 s)	A ^H	-	S _{best} : 5.68 ± 0.20 s; S _{total} : 34.90 ± 1.21 s; S _{dec} : 2.42 ± 1.43%	-	-	B[La] ³ : 7.6 ± 1.4 mmol·L ⁻¹
	SHU	1 × 8	30 m (15 + 15)	On 25 s (~19 s)	A ^H	-	S _{best} : 5.64 ± 0.16 s; S _{total} : 46.41 ± 1.32 s; S _{dec} : 2.85 ± 1.51%	-	-	B[La] ³ : 7.9 ± 2.1 mmol·L ⁻¹
	STR	1 × 8	30 m	On 25 s (~20 s)	A ^H	-	S _{best} : 4.50 ± 0.15 s; S _{total} : 37.21 ± 1.23 s; S _{dec} : 3.29 ± 0.91%	-	-	B[La] ³ : 8.1 ± 1.4 mmol·L ⁻¹
Alizadeh et al. [167]	STR	1 × 6	35 m	10 s	P	-	High, S _{best} : 5.34 ± 0.13 s; S _{total} : 33.47 ± 0.99 s; S _{dec} : 9.6 ± 0.1%; Med, S _{best} : 5.39 ± 0.14 s; S _{total} : 34.77 ± 0.56 s; S _{dec} : 9.3 ± 0.2%; Low, S _{best} : 6.22 ± 0.39 s; S _{total} : 40.56 ± 3.50 s; S _{dec} : 9.2 ± 0.3%	-	-	High, Δ B[La] ³ : 1.73 to 6.97 mmol·L ⁻¹ ; MED, Δ B[La] ³ : 1.9 to 9.0 mmol·L ⁻¹
Almansba et al. [96]	MD ^Y	1 × 6	40	20 s	P	-	S _{best} : 7.97 ± 0.39 s; S _{avg} : 8.37 ± 0.30 s; S _{dec} : 4.8 ± 2.0%	6–20: 15.2 ± 1.6 au	-	B[La] ² : 12.9 ± 1.5 mmol·L ⁻¹ ; HR _{peak} : 189 ± 7 b·min ⁻¹ HR _{av} : 195 ± 8 b·min ⁻¹

Study	Exercise protocol				Outcomes					
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
	STR	1 × 6	40	20 s	P	-	S _{best} : 5.75 ± 0.28 s; S _{avg} : 6.16 ± 0.29 s; S _{dec} : 6.7 ± 3.1%	6–20: 13.9 ± 1.8 au		B[La] ²⁺ : 11.6 ± 1.2 mmol·L ⁻¹ ; HR _{peak} : 185 ± 6 b·min ⁻¹ ; HR _{avg} : 178 ± 9 b·min ⁻¹
Altimari et al. [181]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	1TR, S _{avg} : 7.08 ± 0.27 s; S _{dec} : 5.3 ± 1.3%; 2TR, S _{avg} : 7.16 ± 0.25 s; S _{dec} : 5.4 ± 1.2%; 3TR, S _{avg} : 7.08 ± 0.27 s; S _{dec} : 5.6 ± 1.5%	-	-	-
Archiza et al. [182]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	Sham, S _{best} : 7.50 ± 0.20 s; S _{avg} : 7.90 ± 0.20 s; S _{dec} : 6.3 ± 3.0%; INT, S _{best} : 7.60 ± 0.30 s; S _{avg} : 8.20 ± 0.30 s; S _{dec} : 7.9 ± 2.4%	-	-	-
Attene et al. [115]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{best} : 6.41 ± 0.43 s; S _{total} : 67.27 ± 4.43 s; S _{dec} : 10.9 ± 4.3%	CR10: 8.6 ± 0.5 au	-	B[La] ³⁺ : 9.5 ± 1.6 mmol·L ⁻¹
Ayarra et al. [183]	STR	1 × 6	30 m	25 s	A	-	S _{total} : 26.03 ± 2.09 s; S _{dec} : 1.7 ± 3%	-	-	-
Aziz et al. [184]	STR	1 × 8	40 m	30 s	A ^I	-	S _{best} : 5.45 ± 0.23 s; S _{total} : 45.90 ± 1.64 s; S _{dec} : 5.4 ± 2.7%		-	-
Baldi et al. [185]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	S _{best} : 7.13 ± 0.24 s; S _{dec} : 5.2 ± 1.6%		-	B[La] _{peak} : 17.6 ± 2.6 mmol·L ⁻¹
Balsalobre-Fernández et al. [186]	STR	1 × 6	35 m	10 s	P	-	-	-	△ CMJ ^{AA} : -4.2 cm (-9.2 ± 4.8%)	-
Beato et al. [187]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	STR-G, S _{best} : 7.13 ± 0.17 s, S _{avg} : 7.46 ± 0.19 s; SHU-G group, S _{best} : 7.14 ± 0.18 s, S _{avg} : 7.50 ± 0.21 s	-	-	-
	STR	3 × 7	30 m	20 s	P	4 min P	-	CR10: 6.3 ± 0.5 au	-	-
	SHU	3 × 7	40 m	20 s	P	4 min P	-	CR10: 6.4 ± 0.6 au	-	-
Beato et al. [188]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	STR-G, S _{best} : 7.30 ± 0.15 s; S _{avg} : 7.56 ± 0.20 s; SHU-G, S _{best} : 7.23 ± 0.32 s; S _{avg} : 7.46 ± 0.31 s	-	-	-
	STR	3 × 7	30 m	20 s	P	4 min P	-	CR10: 6.1 ± 0.8 au	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
	SHU	3 × 7	40 m (20 + 20)	20 s	P	4 min p	-	CR10: 6.4 ± 0.7	-	-
Beato & Drust [162]	STR	3 × 7	30 m	25 s	A ^Q	3 min p	-	-	-	HR _{peak} : 192 ± 12 b·min ⁻¹
Beaven et al. [189]	STR	1 × 5	40 m	On 30 s (~24 s)	P	-	S _{total} : 27.58 ± 1.58 s		-	HR _{post} : 139 ± 8 b·min ⁻¹
Binnie et al. [190]	STR	1 × 8	20 m	20 s	A ^W	-	SAN, S _{total} : 30.97 ± 1.58 s; S _{dec} : 4.8 ± 2.1%; GRA, S _{total} : 29.56 ± 1.69 s; S _{dec} : 4.5 ± 2.2%	-	-	SAN, B[La] _{peak} : 6.5 ± 2.3 mmol·L ⁻¹ ; GRA, B[La] _{peak} : 5.7 ± 2.5 mmol·L ⁻¹
Binnie et al. [191]	STR	1 × 8	20 m	20 s	A ^K	-	S _{best} : 3.31 s; S _{total} : 27.46 s; S _{dec} : 3.7%		-	B[La] _{post} : 8.2 mmol·L ⁻¹ HR _{peak} : 160 b·min ⁻¹
Binnie et al. [192]	STR	1 × 8	20 m	20 s	A ^K	-	S _{best} : 3.34 s; S _{total} : 27.94 s; S _{dec} : 4.4%	-	-	B[La] _{post} : 7.5 mmol·L ⁻¹ HR _{peak} : 163 b·min ⁻¹
Blasco-Lafarga et al. [108]	MD ^C	1 × 7	34.2 m	25 s	A ^K	-	S _{best} : 5.72 ± 0.13 s; S _{avg} : 5.91 ± 0.14 s; S _{total} : 41.41 ± 0.99 s; S _{dec} : 3.5 ± 1.6%	CR10: 9.1 ± 2.2 au	-	B[La] ³⁺ : 8.5 ± 1.4 mmol·L ⁻¹
Borges et al. [193]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	RES, S _{best} : 7.35 ± 0.07 s; S _{avg} : 7.70 ± 0.14 s; PLY, S _{best} : 7.21 ± 0.18 s; S _{avg} : 7.55 ± 0.22 s	-	-	-
Brahim et al. [97]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	S _{dec} : 2.7 ± 1.3%		-	-
	MD ^B	1 × 12	20 m	40 s	P	-	S _{dec} : 3.8 ± 2.3%		-	-
	MD ^A	1 × 7	34.2 m	25 s	A ^K	-	S _{dec} : 4.3 ± 3.4%		-	-
Brini et al. [154]	SHU	1 × 10	30 m	30 s	P	-	S _{best} : 5.80 ± 0.21 s; S _{total} : 58.99 ± 1.67 s	CR10: 4.3 ± 0.5 au	-	B[La] _{post} : 5.3 ± 1.7 mmol·L ⁻¹ ; HR _{peak} : 194 ± 2 b·min ⁻¹
	SHU	1 × 10	30 m	30 s	A ^X	-	S _{best} : 5.88 ± 0.15 s; S _{total} : 59.58 ± 1.36 s	CR10: 5.0 ± 0.6 au		B[La] _{post} : 5.5 ± 2.1 mmol·L ⁻¹ ; HR _{peak} : 195 ± 2 b·min ⁻¹
	SHU	1 × 10	30 m	30 s	A ^Y	-	S _{best} : 5.91 ± 0.15 s; S _{total} : 60.02 ± 1.11 s	CR10: 7.4 ± 0.8 au	-	B[La] _{post} : 6.8 ± 2.2 mmol·L ⁻¹ ; HR _{peak} : 195 ± 2 b·min ⁻¹
	SHU	1 × 10	30 m	30 s	A ^Z	-	S _{best} : 5.92 ± 0.11 s; S _{total} : 60.10 ± 0.94 s	CR10: 8.2 ± 0.8 au	-	B[La] _{post} : 6.6 ± 2.1 mmol·L ⁻¹ ; HR _{peak} : 196 ± 2 b·min ⁻¹

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Brini et al. [194]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	SSG, S_{best} : 5.90 ± 0.11 s; S_{avg} : 5.98 ± 0.68 s; S_{total} : 59.78 ± 0.68 s; RS, S_{best} : 5.88 ± 0.13 s; S_{avg} : 5.97 ± 1.14 s; S_{total} : 59.72 ± 1.14 s	-	-	SSG, HR_{peak} : 186 ± 4 b·min ⁻¹ ; RS, HR_{peak} : 189 ± 3 b·min ⁻¹
Brini et al. [195]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S_{best} : 5.89 ± 0.10 s; S_{total} : 59.60 ± 0.90 s; S_{dec} : $1.2 \pm 0.5\%$	CR10: 7 ± 1 au	-	B[La] ³⁺ : 6.6 ± 2.1 mmol·L ⁻¹ ; HR_{peak} : 191 ± 1 b·min ⁻¹
	MD	1 × 10	30 m	30 s	P	-	S_{best} : 5.90 ± 0.10 s; S_{total} : 59.80 ± 0.90 s; S_{dec} : $1.3 \pm 0.5\%$	CR10: 8 ± 1 au	-	B[La] ³⁺ : 6.8 ± 2.2 mmol·L ⁻¹ ; HR_{peak} : 195 ± 1
Brini et al. [98]	MD	1 × 10	30 m	30 s	P	-	INT, S_{best} : $6.91 \pm 0.1s$; S_{total} : 70.90 ± 0.98 s; CON, S_{best} : 6.87 ± 0.12 s; CON, S_{total} : 69.81 ± 0.62 s	INT, CR10: 5.6 ± 1.4 au; CON, CR10: 6.0 ± 1.3 au	-	INT, B[La] ³⁺ : 5.4 ± 2.1 mmol·L ⁻¹ ; HR_{peak} : 187 ± 3 b·min ⁻¹ ; CON, B[La] ³⁺ : 5.8 ± 2.4 mmol·L ⁻¹ ; HR_{peak} : 187 ± 6 b·min ⁻¹
Brini et al. [46]	MD ^A	1 × 10	30 m	30 s	P	-	PRO, S_{best} : 8.07 ± 0.03 s; S_{total} : 83.35 ± 2.19 s; SEMI, S_{best} : 8.21 ± 0.16 s; S_{total} : 83.56 ± 2.17 s;	PRO, CR10: 6.8 ± 0.6 SEMI, CR10: 6.9 ± 0.6	-	PRO, B[La] ³⁺ : 8.0 ± 2.0 mmol·L ⁻¹ ; HR_{peak} : 187 ± 2 b·min ⁻¹ SEMI, B[La] ³⁺ : 9.5 ± 0.6 mmol·L ⁻¹ ; HR_{peak} : 189 ± 1 b·min ⁻¹
Brocherie et al. [196]	STR	1 × 6	35 m	10 s	P	-	S_{best} : 4.87 ± 0.14 s; S_{total} 31.73 ± 1.13 s; S_{dec} : $8.7 \pm 2.3\%$		-	-
Brocherie et al. [54]	STR	1 × 6	35 m	10 s	P	-	S_{avg} : 5.34 ± 0.25 s; S_{dec} : $9.5 \pm 2.4\%$	6–20: 15.9 ± 0.9 au	△ sprint 1–6: ΔL : 17.5 ± 2.5 to 18.0 ± 2.9 cm; Δz : 1.9 ± 0.3 to 2.7 ± 0.3 cm; F_{zmax} : 2.36 ± 0.18 to 2.41 ± 0.14 N; K_{vert} : 127.6 ± 17.7 to 91.4 ± 10.4 kN·m ⁻¹ ; K_{leg} : 13.7 ± 1.7 to 13.8 ± 2.7 kN·m ⁻¹	B[La] ⁴⁺ : 10.5 ± 2.0 mmol·L ⁻¹
Brocherie et al. [197]	STR	1 × 8	20 m	On 20 s (~17 s)	P	-	HYP, S_{total} : 27.23 ± 1.15 s; S_{dec} : $4.0 \pm 1.7\%$; NOR, 27.05 ± 0.81 s; S_{dec} : $4.3 \pm 1.9\%$; CON, 26.98 ± 1.03 s; S_{dec} : $5.2 \pm 2.1\%$	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Broderick et al. [141]	STR	1 × 3	15 m	20 s	P	-	INT, S_{best} : 2.58 ± 0.10 s; S_{total} : 7.82 ± 0.32 s; CON, S_{best} : 2.58 ± 0.10 s; S_{total} : 7.84 ± 0.31 s	-	-	-
Buchheit [198]	STR	1 × 6	30 m	20 s	P	-	S_{best} : 5.73 ± 0.27 s; S_{avg} : 5.90 ± 0.27 s; S_{dec} : $2.8 \pm 0.9\%$	-	-	-
	SHU	1 × 6	25 m	25 s	A ^L	-	S_{best} : 3.96 ± 0.15 s; S_{avg} : 4.09 ± 0.17 s; S_{dec} : $3.2 \pm 1.3\%$			
Buchheit et al. [59]	STR	1 × 6	25 m	On 25s (~21 s)	A ^L	-	S_{best} : 3.97 ± 0.15 s; S_{avg} : 4.09 ± 0.16 s; S_{dec} : $2.8 \pm 1.2\%$	CR10: 7 ± 1 au	-	B[La] ³⁺ : 9.4 ± 2.4 mmol·L ⁻¹ ; $\text{VO}_{2\text{avg}}$: 38.1 ± 5.0 ml·min ⁻¹ ·kg ⁻¹ (% $\text{VO}_{2\text{max}}$: $76 \pm 10\%$); HR_{peak} : 175 ± 11 b·min ⁻¹ (% HR_{max} : $95 \pm 6\%$)
	SHU	1 × 6	25 m (12.5 + 12.5)	On 25 s (~20 s)	A ^L	-	S_{best} : 5.186 ± 0.16 s; S_{avg} : 5.29 ± 0.17 s; S_{dec} : $2.5 \pm 1.0\%$	CR10: 7 ± 1 au	-	B[La] ³⁺ : 9.9 ± 2.0 mmol L ⁻¹ ; $\text{VO}_{2\text{avg}}$: 39.7 ± 5.0 ml·min ⁻¹ ·kg ⁻¹ (% $\text{VO}_{2\text{max}}$: $79 \pm 10\%$); HR_{peak} : 177 ± 11.0 b·min ⁻¹ (% HR_{max} : $96 \pm 6\%$)
	STR	1 × 6	25 m	On 25 s (~21 s)	A ^M	-	S_{best} : 3.98 ± 0.14 s; S_{avg} : 4.14 ± 0.17 s; S_{dec} : $3.9 \pm 1.5\%$	CR10: 8 ± 1 au	-	B[La] ³⁺ : 10.2 ± 2.4 mmol·L ⁻¹ ; $\text{VO}_{2\text{avg}}$: 40.2 ± 4.5 ml·min ⁻¹ ·kg ⁻¹ (% $\text{VO}_{2\text{max}}$: $80 \pm 9\%$); HR_{peak} : 176 ± 11 b·min ⁻¹ (% HR_{max} : $96 \pm 6\%$)
	SHU	1 × 6	25 m (12.5 + 12.5)	On 25 s (~20 s)	A ^M	-	S_{best} : 5.18 ± 0.18 s; S_{avg} : 5.43 ± 0.18 s; S_{dec} : $3.4 \pm 2.3\%$	CR10: 8 ± 1 au	-	B[La] ³⁺ : 10.4 ± 2.1 mmol·L ⁻¹ ; $\text{VO}_{2\text{avg}}$: 42.2 ± 5.0 ml·min ⁻¹ ·kg ⁻¹ (% $\text{VO}_{2\text{max}}$: $84 \pm 10\%$); HR_{peak} : 178 ± 11 b·min ⁻¹ (% HR_{max} : $97 \pm 6\%$)
Buchheit et al. [60]	STR	1 × 6	25 m	On 25 s (~21 s)	A ^L	-	S_{best} : 3.96 ± 0.15 s; S_{avg} : 4.09 ± 0.17 s; S_{dec} : $3.2 \pm 1.3\%$	CR10: 7.2 ± 1.4 au	-	Δ B[La] ³⁺ : 2.2 ± 0.2 to 9.3 ± 2.4 mmol·L ⁻¹ ; $\text{VO}_{2\text{avg}}$: 35.8 ± 4.7 ml·min ⁻¹ ·kg ⁻¹ (% $\text{VO}_{2\text{max}}$: $77.4 \pm 9.3\%$); HR_{peak} : 173 ± 9 b·min ⁻¹ (% HR_{max} : $94 \pm 5\%$)

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Buchheit et al. [99]	SHU	1 × 6	25 m (12.5 + 12.5)	On 25 s (~20 s)	A ^L	-	S _{best} : 5.16 ± 0.17 s; S _{avg} : 5.30 ± 0.17 s S _{dec} : 2.6 ± 1.2%	CR10: 7.2 ± 0.8 au	-	△ B[La] ³⁺ : 2.2 ± 0.2 to 10.0 ± 1.7 mmol·L ⁻¹ ; VO _{2avg} : 40.4 ± 5.2 ml·min ⁻¹ ·kg ⁻¹ (% VO _{2max} : 80.5 ± 10.3%); HR _{peak} : 173 ± 10 b·min ⁻¹ (% HRmax: 94 ± 5%)
	STR	1 × 6	30 m	On 25 s (~20 s)	A ^L	-	S _{best} : 4.37 ± 0.17 s; S _{avg} : 4.69 ± 0.20 s S _{dec} : 6.7 ± 2.5%	CR10: 7.4 ± 1.5 au	-	△ B[La] ³⁺ : ↑ 10.1 ± 2.2 mmol·L ⁻¹ ; HR _{peak} : 184 ± 7 b·min ⁻¹
	MD ^D	1 × 6	~27.6 m	On 25 s (~20 s)	A ^L	-	S _{best} : 4.38 ± 0.17 s; S _{avg} : 4.61 ± 0.29 s S _{dec} : 4.8 ± 3.6%	CR10: 6.9 ± 1.7 au	-	△ B[La] ³⁺ : ↑ 8 ± 2.3 mmol·L ⁻¹ ; HR _{peak} : 181 ± 8 b·min ⁻¹
	MD ^E	1 × 6	~21.2 m	On 25 s (~20 s)	A ^L	-	S _{best} : 4.36 ± 0.15 s; S _{avg} : 4.69 ± 0.16 s S _{dec} : 7.0 ± 3.2%	CR10: 6.0 ± 1.6 au	-	△ B[La] ³⁺ : ↑ 6.1 ± 2.5 mmol·L ⁻¹ ; HR _{peak} : 178 ± 9 b·min ⁻¹
	MD ^F	1 × 6	~ 19.2 m	On 25 s (~20 s)	A ^L	-	S _{best} : 4.39 ± 0.19 s; S _{avg} : 4.73 ± 0.19 s S _{dec} : 7.1 ± 3.0%	CR10: 6.0 ± 1.1 au	-	△ B[La] ³⁺ : ↑ 7.4 ± 2.3 mmol·L ⁻¹ ; HR _{peak} : 180 ± 8 b·min ⁻¹
Campa et al. [168]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	EL, S _{best} : 7.00 ± 0.30 s; S _{avg} : 7.50 ± 0.40 s; S _{dec} : 6.3 ± 3.1%; S-EL, S _{best} : 7.70 ± 0.20 s; S _{avg} : 7.90 ± 0.20 s; S _{dec} : 3.4 ± 1.1%	-	-	-
Campos et al. [199]	SHU	1 × 8	40m (10 + 20 + 10)	20 s	P	-	IT ₁₀₀ , S _{best} : 8.12 ± 0.20 s; S _{avg} : 8.69 ± 0.36 s; IT ₈₆ , S _{best} : 8.28 ± 0.24 s; S _{avg} : 8.50 ± 0.18 s	-	-	-
Campos-Vazquez et al. [200]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	SQ, S _{best} : 6.99 ± 0.11 s; S _{avg} : 7.40 ± 0.18 s; TG, S _{best} : 7.07 ± 0.18 s; S _{avg} : 7.42 ± 0.15 s	-	-	-
Caprino et al. [201]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{total} : 58.80 ± 2.10 s; S _{dec} : 2.3 ± 1.0%	-	-	△ B[La] ³⁺ : 5.1 ± 1.4 mmol·L ⁻¹ to 12.4 ± 2.8 mmol·L ⁻¹
Castagna et al. [153]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{avg} : 6.17 ± 0.10 s; S _{total} : 60.56 ± 1.60 s; S _{dec} : 3.4 ± 2.3%	-	-	△ B[La] ³⁺ : 2.5 ± 0.7 mmol L ⁻¹ to 14.1 ± 3.5 mmol·L ⁻¹
	SHU	1 × 10	30 m (15 + 15)	30 s	A ^Z	-	S _{avg} : 6.32 ± 0.10 s; S _{total} : 62.15 ± 2.99 s; S _{dec} : 5.0 ± 2.4%	-	-	△ B[La] ³⁺ : 2.4 ± 0.5 to 13.2 ± 2.9 mmol·L ⁻¹

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Castagna et al. [202]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{dec} : 3.4 ± 2.3%	-	-	△ B[La] _{post} : 2.5 ± 0.7 to 13.6 ± 3.1 mmol·L ⁻¹ ; △ B[La] ^{3'} : 2.5 ± 0.7 to 14.2 ± 3.5 mmol·L ⁻¹
Chaouachi et al. [203]	STR	1 × 7	30 m	25 s	A ^Q	-	S _{avg} : 4.50 ± 0.13 s; S _{total} : 31.21 ± 1.13 s; S _{dec} : 6.0 ± 2.5%	-	-	-
Charlot et al. [204]	STR	1 × 6	25 m	25 s	A ^K	-	S _{avg} : 3.84 ± 0.17 s; S _{total} : 23.10 ± 1.10 s; S _{dec} : 7.4 ± 3.9%	-	-	-
	SHU	1 × 6	25 m (12.5 + 12.5)	25 s	A ^K	-	S _{avg} : 5.32 ± 0.17 s; S _{total} : 30.50 ± 2.30 s; S _{dec} : 4.1 ± 1.3%	-	-	-
Chen et al. [205]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	S _{best} : 7.50 ± 0.50 s; S _{total} : 45.9 ± 3.34 s; S _{dec} : 3.5 ± 2.5%	6–20: 15 ± 3.6 au	-	B[La] _{post} : 9.8 ± 2.1 mmol·L ⁻¹ ; HR _{peak} : 171 ± 12 b·min ⁻¹
Clifford et al. [34]	STR	1 × 20	30 m	30 s	P	-	INT, S _{best} : 4.41 ± 0.23 s; S _{avg} : 4.65 ± 0.25 s; PLA: 4.48 ± 0.14 s; S _{avg} : 4.70 ± 0.15 s	INT, 6–20: 15 ± 1 au; PLA, 6–20: 14 ± 2 au	INT, △ CMJ ^{AA} : -11.8 ± 8.9%; PLA, △ CMJ ^{AA} : -9.6 ± 4.8%	INT, CK 24 h: 188 ± 62 to 542 ± 461 u·L ⁻¹ (188%); PLA, CK 24 h: 318 ± 145 to 592 ± 321 u·L ⁻¹ (86%)
Corrêa et al. [206]	STR	1 × 6	35 m	10 s	P	-	S _{total} : 31.17 ± 1.03 s; S _{dec} : 8.2 ± 2.77%	-	-	-
Costello et al. [127]	STR	1 × 20	20 m	20 s	A	-	S _{avg} : 3.43 ± 0.2 s	CR10: 9 ± 1.1	-	B[La] _{post} : 12.4 ± 2.6 mmol·L ⁻¹ ; HR _{avg} : 178 ± 8 b·min ⁻¹
Cuadrado-Peñafiel et al. [207]	SHU	1 × 6	40 m (20 + 20)	30 s	P	-	SOC, S _{best} : 7.01 ± 0.22 s; S _{dec} : 2.7 ± 0.6%; FUT: 7.26 ± 0.19 s; S _{dec} : 4.4 ± 1.2%	-	-	SOC, B[La] _{post} : 13.7 ± 2.8 mmol·L ⁻¹ ; FUT, B[La] _{post} : 14.3 ± 3.4 mmol·L ⁻¹
Da Silva et al. [208]	SHU	1 × 7	34.2 m	25 s	P	-	S _{best} : 6.30 ± 0.24 s; S _{avg} : 6.56 ± 0.23 s; S _{dec} : 4.0 ± 1.9%	-	-	B[La] _{peak} : 15.4 ± 2.2 mmol·L ⁻¹
Dal Pupo [116]	STR	1 × 6	25 m	15 s	A	-	S _{best} : 3.80 ± 0.18 s; S _{avg} : 3.98 ± 0.20 s; S _{dec} : 4.7 ± 2.0%	-	△ CMJ ^{AB} : 43.52 ± 1.48 to 41.68 ± 1.25 cm (-4.2%)	B[La] _{peak} : 11.1 ± 2.4 mmol·L ⁻¹
	SHU	1 × 6	25 m (12.5 + 12.5)	15 s	A	-	S _{best} : 5.17 ± 0.23 s; S _{avg} : 5.34 ± 0.23 s; S _{dec} : 3.2 ± 1.4%	-	△ CMJ ^{AB} : 43.52 ± 1.48 to 40.37 ± 1.28 cm (-7.2%)	B[La] _{peak} : 12.2 ± 3.3 mmol·L ⁻¹

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Dal Pupo et al. [209]	STR	1 × 6	25 m	15 s	A	-	$S_{\text{best}}: 3.73 \pm 0.12 \text{ s}; S_{\text{avg}}: 3.91 \pm 0.15 \text{ s}; S_{\text{dec}}: 4.7 \pm 1.8\%$	-	-	-
	SHU	1 × 6	25 m (12.5 + 12.5)	15 s	A	-	$S_{\text{best}}: 5.13 \pm 0.22 \text{ s}; S_{\text{avg}}: 5.30 \pm 0.20 \text{ s}; S_{\text{dec}}: 3.3 \pm 0.9\%$	-	-	-
Daneshfar et al. [210]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	Test, $S_{\text{best}}: 6.35 \pm 0.08 \text{ s}; S_{\text{total}}: 68.97 \pm 0.23 \text{ s}; S_{\text{dec}}: 9.1 \pm 1.1\%$ Retest, $S_{\text{best}}: 6.30 \pm 0.08 \text{ s}; S_{\text{total}}: 69.25 \pm 0.24 \text{ s}; S_{\text{dec}}: 9.3 \pm 1.1\%$	CR10: $8.8 \pm 0.1 \text{ au}$	-	$B[\text{La}]^3: 10.0 \pm 0.1 \text{ mmol} \cdot \text{L}^{-1}$
Dardouri et al. [211]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	$S_{\text{best}}: 6.15 \pm 0.25 \text{ s}; S_{\text{total}}: 63.90 \pm 2.50 \text{ s}; S_{\text{dec}}: 4.1 \pm 1.4\%$	-	-	$B[\text{La}]^3: 14.8 \pm 0.4 \text{ mmol} \cdot \text{L}^{-1}$
De Andrade et al. [212]	STR	1 × 6	35 m	10 s	P	-	$S_{\text{best}}: 4.43 \pm 0.17 \text{ s}; S_{\text{avg}}: 4.91 \pm 0.23 \text{ s}; S_{\text{total}}: 29.45 \pm 1.39 \text{ s}; S_{\text{dec}}: 11.3 \pm 7.6\%$	-	-	$B[\text{La}]_{\text{peak}}^1: 13.7 \pm 2.4 \text{ mmol} \cdot \text{L}^{-1}$
Delextrat et al. [213]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	$M, S_{\text{total}}: 58.40 \pm 2.80 \text{ s}; S_{\text{dec}}: 4.3 \pm 0.4\%; F, S_{\text{total}}: 63.50 \pm 2.20 \text{ s}; S_{\text{dec}}: 3.6 \pm 0.9\%$	-	-	-
Delextrat et al. [214]	SHU	1 × 6	20 m (10 + 10)	On 20 s (~15 s)	P	-	$S_{\text{total}}: 29.00 \pm 2.10 \text{ s}; S_{\text{dec}}: 4.0 \pm 2.7\%$	-	-	-
Delextrat et al. [175]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	$M, S_{\text{total}}: 58.01 \pm 3.01 \text{ s}; S_{\text{dec}}: 4.3 \pm 1.5\%; F, S_{\text{total}}: 63.34 \pm 2.38 \text{ s}; S_{\text{dec}}: 3.6 \pm 0.3\%$	-	-	-
Dellal et al. [61]	STR	1 × 10	20 m	30 s	A ^K	-	-	-	-	$\text{HR}_{\text{peak}}: 191 \text{ b} \cdot \text{min}^{-1}$ (% HRmax: 91%)
	STR	1 × 10	30 m	30 s	A ^K	-	-	-	-	$\text{HR}_{\text{peak}}: 198 \text{ b} \cdot \text{min}^{-1}$ (% HRmax: 95%)
	STR	1 × 15	20 m	30 s	A ^K	-	-	-	-	$\text{HR}_{\text{peak}}: 198 \text{ b} \cdot \text{min}^{-1}$; (% HRmax: 95%)
Dellal & Wong [100]	MD ^x	1 × 10	20 m	25 s	A ^K	-	U17, $S_{\text{best}}: 5.39 \pm 0.03 \text{ s}; S_{\text{avg}}: 5.47 \pm 0.04 \text{ s}; S_{\text{total}}: 32.76 \pm 0.24 \text{ s}; S_{\text{dec}}: 1.4 \pm 0.6\%$; U19, $S_{\text{best}}: 5.34 \pm 0.03 \text{ s}; S_{\text{avg}}: 5.39 \pm 0.04 \text{ s}; S_{\text{total}}: 32.25 \pm 0.26 \text{ s}; S_{\text{dec}}: 1.0 \pm 0.4\%$; PRO, $S_{\text{best}}: 5.31 \pm 0.05 \text{ s}; S_{\text{avg}}: 5.37 \pm 0.07 \text{ s}; S_{\text{total}}: 32.22 \pm 0.42 \text{ s}; S_{\text{dec}}: 1.2 \pm 0.5\%$	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Dent et al. [131]	STR	4 × 6	30 m	On 30 s (~25 s)	A ^K	7 min P	M, S _{best} : set 1, 4.29 ± 0.05 s; set 2, 4.35 ± 0.02 s; set 3, 4.45 ± 0.10 s; set 4, 4.49 ± 0.11 s; S _{avg} : set 1, 4.47 ± 0.9 s; set 2, 4.54 ± 0.12 s; set 3, 4.60 ± 0.13 s; set 4, 4.54 ± 0.12 s; S _{dec} : set 1, 4.7 ± 1.4%; set 2, 4.9 ± 1.4%; set 3, 5.4 ± 2.0%; set 4, 4.3 ± 1.1% F, S _{best} : set 1, 4.74 ± 0.18 s; set 2, 4.87 ± 0.14 s; set 3, 4.96 ± 0.27 s; set 4, 4.97 ± 0.22 s S _{avg} : set 1, 5.09 ± 0.21 s; set 2, 5.17 ± 0.31 s; set 3, 5.24 ± 0.27 s; set 4, 5.23 ± 0.31 s; S _{dec} : set 1, 7.1 ± 2.1%; set 2, 6.6 ± 2.8%; set 3, 7.2 ± 1.3%; set 4, 7.2 ± 2.8%	-	-	M: set 1, Δ B[La] ³⁺ : 0.9 ± 0.4 to 10.0 ± 1.6 mmol·L ⁻¹ ; set 2, B[La] ³⁺ : 11.9 ± 2.9 mmol·L ⁻¹ ; set 3, 11.6 ± 3.3 mmol·L ⁻¹ ; set 4, 11.6 ± 4.0 mmol·L ⁻¹ ; HR _{post} : set 1, 179 ± 20 b·min ⁻¹ ; set 2, 175 ± 38 b·min ⁻¹ ; set 3, 188 ± 10 b·min ⁻¹ ; set 4, 189 ± 10 b·min ⁻¹ ; F: set 1, Δ B[La] ³⁺ : 0.8 ± 0.3 to 10.0 ± 3.5 mmol·L ⁻¹ ; set 2, B[La] ³⁺ : 12 ± 3.6 mmol·L ⁻¹ ; set 3, 12.0 ± 3.3 mmol·L ⁻¹ ; set 4, 12.2 ± 3.7 mmol·L ⁻¹ ; HR _{post} : set 1, 189 ± 9 b·min ⁻¹ ; set 2, 190 ± 8 b·min ⁻¹ ; set 3, 191 ± 6 b·min ⁻¹ ; set 4, 190 ± 8 b·min ⁻¹
Donghi et al. [215]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	-	CR10: 5 ± 1.2 au	-	-
Doyle et al. [216]	STR	1 × 6	20 m	On 15 s (~12 s)	A ^W	-	S _{best} : 3.43 ± 0.16 s; S _{total} : 21.42 ± 0.97 s; S _{dec} : 4.4 ± 0.3%	-	-	-
Dupont et al. [217]	STR	1 × 7	30 m	20 s	A	-	S _{avg} : 4.60 ± 0.14 s	-	-	-
Dupont et al. [86]	STR	1 × 15	40 m	25 s	A ^Z	-	S _{avg} : 6.41 ± 0.31 s; S _{dec} : 8.6 ± 3.2%	-	-	B[La] ³⁺ : 13.8 ± 3.1 mmol·L ⁻¹ ; VO _{2avg} : 60.5 ± 4.3 ml·min ⁻¹ ·kg ⁻¹
Eliakim et al. [124]	STR	1 × 12	20 m	On 20 s (~17 s)	P	-	S _{best} : 3.23 ± 0.17 s; S _{avg} : 3.24 ± 0.04 s; S _{total} : 38.91 ± 0.52 s; S _{dec} : 2.3 ± 0.6	CR10: 7 ± 1 au	-	HR _{avg} : 177 ± 6 b·min ⁻¹ HR _{post} : 181 ± 4 b·min ⁻¹
Elias et al. [218]	STR	1 × 6	20 m	On 30 s (~27 s)	P	-	PAS, S _{total} : 18.53 ± 0.28 s; COL, S _{total} : 18.62 ± 0.46 s; CWT, S _{total} : 18.63 ± 0.45 s	-	-	-
Elias et al. [219]	STR	1 × 6	20 m	On 30 s (~27 s)	P	-	PAS, S _{total} : 18.66 ± 0.37 s; COL, S _{total} : 18.50 ± 0.47 s; CWT, S _{total} : 18.68 ± 0.39 s	-	-	-
Eniseler et al. [220]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	RS, S _{best} : 6.75 ± 0.19 s; S _{avg} : 7.13 ± 0.17 s; S _{dec} : 5.5 ± 0.8% SSG, S _{best} : 6.73 ± 0.19 s; S _{avg} : 7.12 ± 0.17 s; S _{dec} : 5.8 ± 1.1%	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Eryilmaz & Kaynak [221]	STR	1 × 10	20 m	20 s	A ^K	-	S _{best} : 2.97 ± 0.10 s; S _{avg} : 3.21 ± 0.10 s; S _{dec} : 8.0 ± 2.7%	-	-	-
Eryilmaz et al. [37]	STR	1 × 10	20 m	20 s	A ^K	-	S _{avg} : 4.28 ± 0.10 s	-	-	-
Essid et al. [222]	SHU	1 × 6	30 m (15 + 15)	On 20 s (~14 s)	P	-	S _{best} : 6.19 ± 0.03 s; S _{avg} : 6.78 ± 0.03; S _{dec} : 8.7 ± 0.0%	-	-	-
Farjallah et al. [223]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	INT, S _{avg} : 7.18 ± 0.23 s; PLA, S _{avg} : 7.34 ± 0.03 s	-	-	-
Figueira et al. [119]	SHU	3 × 10	30 m (15 + 15)	30 s	P	5 min p	S _{total} : 59.22 ± 2.10 s; S _{dec} : 3.6 ± 1.6%	-	-	B[La] ³⁺ : 13.0 ± 2.3 mmol·L ⁻¹ ; HR _{peak} : 174 ± 7 b·min ⁻¹
	STR	3 × 20	15 m	15 s	P	5 min p	S _{total} : 53.66 ± 1.56 s; S _{dec} : 4.9 ± 2.1%	-	-	B[La] ³⁺ : 8.5 ± 3.4 mmol·L ⁻¹ HR _{peak} : 174 ± 7 b·min ⁻¹
Freitas et al. [227]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{total} : 57.50 ± 2.89 s; S _{dec} : 2.9 ± 1.0%	-	-	-
Fornasier-Santos et al. [224]	STR	1 × 10	40 m	On 30 s (~25 s)	P	-	-	HYP, CR10: 9.2 ± 0.7 au NOR, CR10: 9.2 ± 0.7 au	-	HYP: 13.7 ± 4.3 mmol·L ⁻¹ NOR: 13.0 ± 4.2 mmol·L ⁻¹
	STR	2 × 8	40 m	NR	P	3 min p	-	CR10: 8.3 ± 0.5	-	10.2 ± 3.3 mmol·L ⁻¹
Fort-Vanmeerhaeghe et al. [225]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{best} : 6.20 ± 0.20 s; S _{avg} : 6.34 ± 0.19 s	-	-	-
Fortin & Billaut [226]	STR	1 × 12	20 m	20 s	A ^K	-	Sham, S _{best} : 3.07 ± 0.13 s; S _{total} : 39.69 ± 1.34 s; INT, S _{best} : 3.05 ± 0.08 s; S _{total} : 39.79 ± 1.65 s	-	-	-
Gabbett [228]	STR	1 × 6	20 m	On 15 s (~12 s)	A ^J	-	S _{total} : 21.50 ± 1.20 s; S _{dec} : 5.6 ± 1.6%	-	-	B[La] _{post} : 9.3 ± 2.0 mmol·L ⁻¹ HR _{peak} : 182 ± 6 b·min ⁻¹
Gabbett et al. [89]	STR	1 × 12	20 m	On 20 s (~17 s)	P	-	S _{total} : 38.70 ± 2.30 s	-	-	-
Gabbett et al. [229]	STR	1 × 12	20 m	On 20 s (~17 s)	P	-	ST, S _{total} : 38.30 ± 2.80 s; N-ST, S _{total} : 38.90 ± 3.20; N-SEL, S _{total} : 39.10 ± 3.30	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Gabbett et al. [230]	STR	1 × 6	20 m	On 15 s (~12 s)	A ^J	-	INT, S _{total} : 21.16 ± 1.06 s; CON, S _{total} : 20.71 ± 0.52 s	-	-	-
Galvin et al. [231]	STR	1 × 10	30 m	30 s	P	-	HYP, S _{total} : 32.20 ± 1.10 s; S _{dec} : 4.0 ± 3.0%; NOR, S _{total} : 32.70 ± 1.20 s; S _{dec} : 5.1 ± 3.9%	-	-	-
Galy et al. [177]	STR	1 × 6	25 m	25 s	A ^K	-	MG, S _{best} : 3.77 ± 0.19 s; S _{avg} : 3.99 ± 0.17 s; S _{total} : 23.96 ± 1.05 s; S _{dec} : 5.9 ± 3.1%; N-MG, S _{best} : 3.92 ± 0.19 s; S _{avg} : 4.09 ± 0.17 s; S _{total} : 24.55 ± 1.01 s; S _{dec} : 4.4 ± 1.8%	-	-	-
	SHU	1 × 6	25 m (12.5 + 12.5)	25 s	A ^K	-	MG, S _{best} : 5.29 ± 0.19 s; S _{avg} : 5.47 ± 0.19 s; S _{total} : 32.79 ± 1.14 s; S _{dec} : 3.4 ± 1.0%; N-MG, S _{best} : 5.31 ± 0.18 s; S _{avg} : 5.53 ± 0.15 s; S _{total} : 33.21 ± 0.92 s; S _{dec} : 4.3 ± 0.8%	-	-	-
Gantois et al. [232]	STR	1 × 6	30 m	20 s	P	-	S _{best} : 4.59 ± 0.24 s; S _{avg} : 4.82 ± 0.31 s; S _{total} : 27.60 ± 6.77 s; S _{dec} : 5.3 ± 2.9%	-	-	-
Gantois et al. [14]	STR	1 × 6	30 m	20 s	P	-	RS, S _{best} : 4.56 ± 0.24 s; S _{avg} : 4.83 ± 0.38 s; S _{total} : 29.00 ± 2.30; S _{dec} : 6.4 ± 3.5%; CON, S _{best} : 4.64 ± 0.24 s; S _{avg} : 4.87 ± 0.22; S _{total} : 29.08 ± 1.56 s; S _{dec} : 4.1 ± 1.8%	-	-	-
Gantois et al. [233]	STR	1 × 6	30 m	20 s	P	-	S _{best} : 4.58 ± 0.21 s; S _{avg} : 4.84 ± 0.31; S _{total} : 29.00 ± 1.91 s; S _{dec} : 7.6 ± 5.8%	-	-	-
García-Unanue et al. [169]	STR	1 × 7	30 m	20 s	P	-	ELT, S _{avg} : 4.37 ± 0.15 s; S _{dec} : 4.2 ± 1.4%; AM, S _{avg} : 4.67 ± 0.18 s; S _{dec} : 6.4 ± 2.2%	-	ELT, Δ CMJ ^{AA} : 35.7 ± 6.0 to 34.0 ± 4.3 cm (-4.8%) AM, Δ CMJ ^{AA} : 33.8 ± 4.2 to 31.8 ± 3.6 cm (-5.9%)	-
Gatterer et al. [234]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	NOR, S _{best} : 7.18 ± 0.24 s; S _{avg} : 7.60 ± 0.19 s; S _{dec} : 5.8 ± 1.9%; HYP, 7.28 ± 0.21 s; S _{avg} : 7.66 ± 0.32 s; S _{dec} : 5.2 ± 2.6%	-	-	-

Study	Exercise protocol				Outcomes					
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Gharbi et al. [83]	SHU	1 × 2	30 m (15 + 15)	30 s	P	-	S _{best} : 6.26 ± 0.24 s; S _{total} : 12.63 ± 0.47 s; S _{dec} : 1.0 ± 0.7%	-	-	B[La] ³⁺ : 1.8 ± 0.6 to 5.7 ± 1.2 mmol·L ⁻¹
	SHU	1 × 3	30 m (15 + 15)	30 s	P	-	S _{best} : 6.18 ± 0.23 s; S _{total} : 18.75 ± 0.61 s; S _{dec} : 1.5 ± 1.0%	-	-	B[La] ³⁺ : 1.8 ± 0.6 to 9.4 ± 1.7 mmol·L ⁻¹
	SHU	1 × 4	30 m (15 + 15)	30 s	P	-	S _{best} : 6.17 ± 0.21 s; S _{total} : 25.05 ± 0.81 s; S _{dec} : 2.0 ± 1.1%	-	-	B[La] ³⁺ : 1.8 ± 0.6 to 9.6 ± 1.9 mmol·L ⁻¹
	SHU	1 × 5	30 m (15 + 15)	30 s	P	-	S _{best} : 6.29 ± 0.20 s; S _{total} : 32.36 ± 1.23 s; S _{dec} : 2.6 ± 1.4%	-	-	B[La] ³⁺ : 1.8 ± 0.6 to 10.5 ± 2.6 mmol·L ⁻¹ ;
	SHU	1 × 9	30 m (15 + 15)	30 s	P	-	S _{best} : 6.28 ± 0.23 s; S _{total} : 58.68 ± 2.38 s; S _{dec} : 3.9 ± 1.3%	-	-	B[La] ³⁺ : 1.8 ± 0.6 to 12.6 ± 2.3 mmol·L ⁻¹ ;
	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{best} : 6.23 ± 0.23 s; S _{total} : 64.96 ± 2.57 s; S _{dec} : 4.5 ± 1.4%	-	-	B[La] ³⁺ : 1.8 ± 0.6 to 12.7 ± 1.0 mmol·L ⁻¹
Gharbi et al. [235]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{best} : 6.10 ± 0.20 s; S _{total} : 63.20 ± 2.20 s; S _{dec} : 3.5 ± 1.1%	-	-	B[La] ³⁺ : 15.3 ± 2.1 mmol·L ⁻¹
Gibson et al. [101]	MD ^A	1 × 6	40 m	25 s	P	-	S _{best} : 7.11 ± 0.25 s; S _{total} : 44.40 ± 1.62 s; S _{dec} : 3.6 ± 1.2%	-	-	-
Girard et al. [236]	STR	1 × 6	35 m	10 s	P	-	S _{avg} : 5.36 ± 0.29 s; S _{dec} : 8.6 ± 2.8%	-	-	-
Girard et al. [149]	STR	1 × 6	20 m	20 s	P	-	S _{avg} : 3.23 ± 0.13 s; S _{dec} : 2.8 ± 1.7%	-	ΔL: 13.6 ± 2.1 to 15.4 ± 2.7 cm; Δz: 1.7 ± 0.4 to 2.2 ± 0.4 cm; F ₂ max: 2.0 ± 0.28 to 2.1 ± 0.26 N; K _{vert} : 120 ± 9.3 to 97 ± 5.2 kN·m ⁻¹ ; K _{leg} : 15.0 ± 10.0 to 13.7 ± 7.0 kN·m ⁻¹	-
González-Frutos et al. [237]	STR	1 × 6	30 m	30 s	A ^K		S _{avg} : 4.89 ± 0.07 s	-	-	-
Gonzalo-skok et al. [102]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	INT, S _{best} : 7.16 ± 0.23 s; S _{avg} : 7.52 ± 0.23 s; S _{dec} : 5.1 ± 1.8%; CON, S _{best} : 7.17 ± 0.24 s; 7.50 ± 0.24 s; S _{dec} : 4.6 ± 1.8%	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
	MD ^G	1 × 5	25 m (5 m per turn)	20 s	P	-	INT, S_{best} : 6.58 ± 0.21 s; S_{avg} : 6.86 ± 0.25 s; S_{dec} : 2.0 ± 0.7 ; CON, S_{best} : 6.56 ± 0.3 ; S_{avg} : 6.84 ± 0.22 s; S_{dec} : $2.3 \pm 1.5\%$	-	-	-
Goodall et al. [238]	STR	1 × 12	30 m	30 s	P	-	S_{best} : 4.23 ± 0.13 s; S_{avg} : 4.68 ± 0.08 s;	-	-	Δ B[La] ³⁺ : 3.1 ± 1.4 to 12.8 ± 3.0 , mmol·L ⁻¹ ; B[La] _{post} sprint 1: 2.7 mmol·L ⁻¹ ; sprint 3: 4.8 mmol·L ⁻¹ ; sprint 5: 7.2 mmol·L ⁻¹ ; sprint 7: 9.1 mmol·L ⁻¹ ; sprint 9: 10.4 mmol·L ⁻¹ ; sprint 11: 11.6 mmol·L ⁻¹
Hamlin et al. [239]	STR	1 × 10	40 m	On 30 s (~24 s)	P	-	CWT, S_{avg} : 6.36 ± 0.40 s; ARC: 6.38 ± 0.50 s	-	-	CTWI, B[La] ³⁺ : 13.6 ± 2.6 mmol·L ⁻¹ ; HR _{avg} : 171 ± 9 b·min ⁻¹ ; AR, B[La] ³⁺ : 14.2 ± 2.3 mmol·L ⁻¹ ; HR _{avg} : 173 ± 11 b·min ⁻¹
Hamlin et al. [240]	STR	1 × 8	20 m	On 20 s (~17 s)	P	-	NOR, S_{total} : 27.40 ± 3.20 ; S_{dec} : $3.5 \pm 1.2\%$; HYP, S_{total} : 27.50 ± 3.90 s; S_{dec} : $3.5 \pm 1.3\%$	-	-	-
Hammami et al. [241]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	INT, S_{best} : 7.13 ± 0.32 s; S_{avg} : 7.39 ± 0.33 s, S_{total} : 44.4 ± 2.0 s; S_{dec} : $3.7 \pm 1.4\%$ INT, S_{best} : 7.21 ± 0.13 s; S_{avg} : 7.44 ± 0.15 s, S_{total} : 44.6 ± 0.9 s; S_{dec} : $3.1 \pm 1.7\%$	-	-	-
Haugen et al. [62]	STR	1 × 12	20 m	60 s	P	-	INT, S_{best} : 3.11 ± 0.17 s; S_{avg} : 3.16 ± 0.17 s CON, S_{best} : 3.02 ± 0.17 s; S_{avg} : 3.07 ± 0.17 s	-	-	INT, B[La] _{post} : 3.8 ± 1.3 mmol·L ⁻¹ ; HR _{peak} (% HRmax): $85 \pm 4\%$ CON, B[La] _{post} : 3.5 ± 1.4 mmol·L ⁻¹ ; HR _{peak} (% HRmax): $86 \pm 4\%$
Haugen et al. [128]	STR	1 × 15	20 m	60 s	P	-	S_{best} : 2.94 ± 0.15 ; S_{avg} : 2.98 ± 0.15	CR10: 3.8 ± 1.2 au	-	B[La] _{post} : 4.4 ± 1.8 mmol·L ⁻¹
Hermassi et al. [242]	STR	1 × 6	30 m	On 20 s (~16 s)	P	-	S_{best} : 4.42 ± 0.14 ; S_{avg} : 4.57 ± 0.12 ; S_{total} : 27.40 ± 0.70 s; $3.4 \pm 1.6\%$	-	-	-
	SHU	1 × 6	30 m (15 + 15)	On 20 s (~14 s)	P	-	S_{best} : 5.97 ± 0.36 ; S_{avg} : 6.23 ± 0.25 ; S_{total} : 37.40 ± 1.50 s; S_{dec} : $4.5 \pm 3.3\%$	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Higham et al. [90]	STR	1 × 6	30 m	On 20 s (~16 s)	P	-	$S_{\text{total}}: 24.76 \pm 0.62 \text{ s}$	-	-	-
Hollville et al. [243]	STR	1 × 6	20 m	On 20 s (~17 s)	P	-	$S_{\text{best}}: 3.14 \pm 0.12 \text{ s}; S_{\text{total}}: 19.30 \pm 0.60 \text{ s}; S_{\text{dec}}: 2.4 \pm 1.3\%$	CR10: $4.5 \pm 1.6 \text{ au}$		HR _{post} (% HR _{max}): $88 \pm 5\%$
Howatson et al. [35]	STR	1 × 15	30 m	60 s	P	-	$S_{\text{best}}: 4.33 \pm 0.21 \text{ s}; S_{\text{avg}}: 4.49 \pm 0.09 \text{ s}; S_{\text{dec}}: 4.5 \pm 1.5\%$	-	-	$\Delta \text{ CK } 24 \text{ h}: 158 \pm 56 \text{ to } 776 \pm 312 \text{ u}\cdot\text{L}^{-1} (385\%)$
Iaia et al. [120]	STR	1 × 15	40 m	30 s	P	-	SEP, $S_{\text{total}}: 86.09 \pm 6.30 \text{ s}; S_{\text{dec}}: 5.0 \pm 2.3\%$; SEM, $S_{\text{total}}: 83.81 \pm 2.37 \text{ s}; S_{\text{dec}}: 4.1 \pm 1.3\%$	-	-	-
Iaia et al. [19]	STR	1 × 6	5 s (~30 m)	15 s	P	-	-	-	-	B[La] _{post} : $3.1 \pm 0.8 \text{ to } 9.3 \pm 1.6 \text{ mmol}\cdot\text{L}^{-1}$
	STR	1 × 6	5 s (~30 m)	30 s	P	-	-	-	-	B[La] _{post} : $3.5 \pm 1.1 \text{ to } 6.6 \pm 1.8 \text{ mmol}\cdot\text{L}^{-1}$
	STR	1 × 15	40 m	30 s	P	-	RS15, $S_{\text{total}}: 92.91 \pm 4.66 \text{ s}; S_{\text{dec}}: 5.9 \pm 2.2\%$; RS30, $S_{\text{total}}: 91.45 \pm 4.35 \text{ s}; S_{\text{dec}}: 5.2 \pm 2.1\%$	-	-	-
Impellizzeri et al. [170]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	Test, $S_{\text{best}}: 6.90 \pm 0.09 \text{ s}; S_{\text{avg}}: 7.20 \pm 0.11 \text{ s}; S_{\text{dec}}: 4.3 \pm 1.2\%$; Retest, $S_{\text{best}}: 6.92 \pm 0.10 \text{ s}; S_{\text{avg}}: 7.19 \pm 0.14 \text{ s}; S_{\text{dec}}: 3.8 \pm 1.4\%$	-	-	-
Impellizzeri et al. [170]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	PRE, $S_{\text{best}}: 6.94 \pm 0.15 \text{ s}; S_{\text{avg}}: 7.32 \pm 0.13 \text{ s}; S_{\text{dec}}: 5.4 \pm 2.2\%$; ELY, $S_{\text{best}}: 6.87 \pm 0.17 \text{ s}; S_{\text{avg}}: 7.16 \pm 0.15 \text{ s}; S_{\text{dec}}: 4.3 \pm 1.7\%$; MID, $S_{\text{best}}: 6.93 \pm 0.15 \text{ s}; S_{\text{avg}}: 7.22 \pm 0.14 \text{ s}; S_{\text{dec}}: 4.2 \pm 1.6\%$; END, $S_{\text{best}}: 6.92 \pm 0.15 \text{ s}; S_{\text{avg}}: 7.20 \pm 0.13 \text{ s}; S_{\text{dec}}: 4.0 \pm 1.7\%$	-	-	-
Impellizzeri et al. [170]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	PRO, $S_{\text{best}}: 6.88 \pm 0.19 \text{ s}; S_{\text{avg}}: 7.12 \pm 0.17 \text{ s}; S_{\text{dec}}: 3.3 \pm 1.5\%$; M-PRO, $S_{\text{best}}: 6.83 \pm 0.18 \text{ s}; S_{\text{avg}}: 7.20 \pm 0.19 \text{ s}; S_{\text{dec}}: 5.1 \pm 1.8\%$; AM, $S_{\text{best}}: 7.08 \pm 0.23 \text{ s}; S_{\text{avg}}: 7.55 \pm 0.25 \text{ s}; S_{\text{dec}}: 6.1 \pm 2.0\%$	-	-	-
Ingebrigtsen et al. [244]	STR	1 × 7	35 m	25 s	A	-	$S_{\text{avg}}: 5.25 \pm 0.19 \text{ s}$	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Ingebrigtsen et al. [171]	STR	1 × 7	35 m	25 s	A	-	EL, S_{avg} : 5.24 ± 0.24 s; S_{dec} : 8.3 ± 5.3%; S-EL, S_{avg} : 5.26 ± 0.18 s; S_{dec} : 6.4 ± 3.7%	-	-	EL, HR_{peak} : 179 ± 9; S-EL, HR_{peak} : 188 ± 7
Iacono et al. [42]	SHU	1 × 6	40 m (20 + 20)	On 20 s (~14 s)	P	-	SSG, S_{best} : 5.30 ± 0.15 s; S_{avg} : 5.48 ± 0.15; S_{dec} : 3.4 ± 0.5% RS, S_{best} : 5.31 ± 0.22 s; S_{avg} : 5.48 ± 0.18; S_{dec} : 3.3 ± 1.0%	-	-	-
Izquierdo et al. [140]	STR	1 × 6	15 m	60 s	P	-	PLA, S_{avg} : 2.45 ± 0.06 s; INT, S_{avg} : 2.39 ± 0.06 s	-	-	-
Jiménez-Reyes et al. [246]	STR	1 × 10	40 m	30 s	P	-	-	-	△ sprint 1–10: V_0 : ↓ 15.1 ± 1.3%; F_0 : ↓ 5.9 ± 4.5%; P_0 : ↓ 20.1 ± 3.3%; RF: ↓ 6.8 ± 2.0%, D_{RF} : ↓ 14.0 ± 6.0	-
Johnston & Gabbett [40]	STR	1 × 12	20 m	On 20 s (~17 s)	A ^W	-	S_{best} : 3.09 ± 0.04 s; S_{avg} : 3.49 ± 0.14 s; S_{total} : 41.89 ± 0.20 s; S_{dec} : 11.4 ± 4.5%	6–20: 12.3 ± 1.2 au	-	HR_{peak} : 166 ± 9 b·min ⁻¹ HR_{avg} : 154 ± 9 b·min ⁻¹
Joo [110]	MD ^A	1 × 7	34.2 m	25 s	A	-	S_{total} : 45.7 ± 2.6 s	-	-	-
Jorge et al. [247]	MD ^A	1 × 7	34.2 m	25	A ^L	-	U20 ELY, S_{avg} : 6.68 ± 0.16 s; S_{dec} : 4.3 ± 1.0%; U20 MID, S_{avg} : 6.20 ± 0.13 s; S_{dec} : 4.1 ± 1.0%; U20 END, S_{avg} : 6.40 ± 0.14 s; S_{dec} : 4.0 ± 1.0%; U17 ELY, S_{avg} : 7.01 ± 0.21 s; S_{dec} : 5.3 ± 2.0%; U17 MID, S_{avg} : 6.25 ± 0.16 s; S_{dec} : 4.5 ± 1.8%; U17 END: S_{avg} : 6.32 ± 0.13 s; S_{dec} : 3.8 ± 1.3%	-	-	-
Kaplan [109]	MD ^A	1 × 7	34.2 m	25	A ^L	-	S_{best} : 7.37 ± 0.26 s; S_{avg} : 7.57 ± 0.25 s; S_{dec} : 4.4 ± 1.7%	-	-	-
Keir et al. [25]	STR	1 × 6	35 m	10 s	P	-	-	-	-	$B[La]_{peak}$: 14.8 ± 2.8 mmol·L ⁻¹ ; VO_{2avg} : 45.6 ± 9.4 ml·min ⁻¹ ·kg ⁻¹ ; HR_{peak} : 182 ± 10 b·min ⁻¹
Keogh [172]	STR	1 × 6	40 m	On 30 s (~25 s)	A ^K	-	REP, S_{dec} : 13.1 ± 1.0; Club, S_{dec} : 12.7 ± 1.4	-	-	-

Study	Exercise protocol				Outcomes					
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Kilduff et al. [248]	SHU	1 × 6	40 m	20 s	P	-	S _{best} : 6.72 ± 0.16 s; S _{avg} : 7.01 ± 0.16 s; S _{total} : 42.09 ± 0.94 s	-	-	-
Klatt et al. [36]	SHU	4 × 6	40 m (20 + 20)	30 s	P	5 min P	U20, S _{best} : 6.99 ± 0.17 s; S _{avg} : 7.39 ± 0.26 s SEN, S _{best} : 7.12 ± 0.29 s; S _{avg} : 7.65 ± 0.32 s;	U20, CR10: 8.7 ± 1.2 au SEN, CR10: 8.3 ± 2.0 au	U20, ΔCMJ ^{AC} : 37.5 ± 5.1 cm to 39 ± 4.7 cm (4.0%) SEN, ΔCMJ ^{AC} : 31.6 ± 3.9 cm to 34.0 ± 3.9 cm (7.6%)	B[La] _{post} : 10.2 ± 2.6 mmol·L ⁻¹ U20, Δ CK 24 h: 285 ± 155 to 354 ± 134 u·L ⁻¹ (24%) SEN, Δ CK 24 h: 214 ± 82 to 443 ± 207 u·L ⁻¹ (47%)
Krakan et al. [249]	STR	1 × 6	25 m	25 s	P	-	RS, S _{best} : 3.78 ± 0.08 s; S _{avg} : 3.97 ± 0.10 s; S _{dec} : 5.0 ± 3.2% PLY, S _{best} : 3.74 ± 0.11 s; S _{avg} : 3.96 ± 0.14 s, S _{dec} : 5.8 ± 0.1	RS, CR10: 7.3 ± 1.5 au PLY, CR10: 8 ± 1.1 au	-	RS, B[La] _{post} : 13.1 ± 2.5 mmol·L ⁻¹ PLY, B[La] _{post} : 14.8 ± 2.3 mmol·L ⁻¹
Krueger et al. [250]	STR	1 × 6	30 m	On 25 s (~21 s)	P	-	CWI, S _{total} : 26.23 ± 1.06 s; CON, S _{total} : 26.05 ± 0.69 s	-	-	-
Lakomy et al. [78]	STR	1 × 6	40 m	30 s	A ^W	-	S _{avg} : 5.97 ± 0.40 s; S _{dec} : 4.2 ± 2.4%	-	-	-
	STR	1 × 6	40 m	30 s	P ^R	-	S _{avg} : 6.03 ± 0.52 s; S _{dec} : 3.9 ± 1.3%	-	-	-
Lapointe et al. [251]	STR	1 × 12	30 m	20 s	A ^K	-	CON, S _{best} : 4.83 ± 0.36 s; S _{avg} : 5.18 ± 0.51 s; S _{dec} : 7.1 ± 3.1%; INT, S _{best} : 4.80 ± 0.35 s; S _{avg} : 5.16 ± 0.47 s; S _{dec} : 7.3 ± 3.2%	CON, CR10: 8 ± 1.2 au INT, CR10: 7.5 ± 1.1 au	-	CON, B[La] ^{1'} : 14.0 ± 2.4 mmol·L ⁻¹ ; INT, B[La] ^{1'} : 13.5 ± 1.5 mmol·L ⁻¹
Le Rossignol et al. [173]	STR	1 × 6	30 m	On 20 s (~16 s)	P	-	SEL, S _{total} : 25.26 ± 0.55 s; N-SEL, S _{total} : 25.92 ± 0.8 s	-	-	-
Little & Williams [121]	STR	1 × 15	40 m	1:6 ^N (~34 s)	P	-	S _{avg} : 5.73 ± 0.07 s	6–20: 14.4 ± 1.0 au	-	B[La] ^{2'} : 9.6 ± 0.6 mmol·L ⁻¹ ; HR _{avg} (% HR _{max}): 85.8 ± 0.8%
	STR	1 × 15	40 m	1:4 ^N (~22 s)	P	-	S _{avg} : 5.93 ± 0.19 s	6–20: 17.1 ± 0.4 au	-	B[La] ^{2'} : 14.1 ± 1.0 mmol·L ⁻¹ ; HR _{avg} (% HR _{max}): 89.2 ± 1.9%
	STR	1 × 40	15 m	1:6 ^N (~16 s)	P	-	S _{avg} : 2.59 ± 0.05 s	6–20: 17.3 ± 0.5 au	-	B[La] ^{2'} : 8.8 ± 1.1 mmol·L ⁻¹ ; HR _{avg} (% HR _{max}): 86.8 ± 1.0%
	STR	1 × 40	15 m	1:4 ^N (~10 s)	P	-	S _{avg} : 2.65 ± 0.10 s	6–20: 18.8 ± 0.4 au	-	B[La] ^{2'} : 13.0 ± 1.7 mmol·L ⁻¹ ; HR _{avg} (% HR _{max}): 89.3 ± 1.2%

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Lockie et al. [252]	STR	1 × 7	30 m	On 20 s (~16 s)	A ^x	-	FSH, S _{avg} : 32.08 ± 1.31 s; EXP, S _{avg} : 31.67 ± 0.76 s	-	-	-
Lockie et al. [253]	STR	1 × 6	20 m	On 15 s (~11s)	A ^x	-	S _{total} : 31.95 ± 1.06 s	-	-	-
Lockie et al. [254]	STR	1 × 7	20 m	On 20 s (~15s)	A ^x	-	S _{total} : 31.95 ± 1.06 s	-	-	-
Lombard et al. [255]	STR	1 × 6	30 m	On 25 s (~21 s)	A ^x	-	S _{total} : 26.77 ± 0.96 s	-	-	-
Madueno et al. [24]	SHU	1 × 12	20 m (15 + 5)	20 s	P	-	-	CR10: 6.5 ± 0.5 au	-	Δ B[La] _{post} : 2.0 to 6.8 mmol·L ⁻¹ ; Δ B[La] ⁵ : 4.8 mmol·L ⁻¹ ; VO _{2avg} : 33.3 ± 4.0 mL·kg ⁻¹ ·min ⁻¹ ; VO _{2avg} (% VO _{2max}): 73.1 ± 9.8%; HR _{avg} : 166 ± 8 b·min ⁻¹ (% HR _{max} : 83 ± 6%)
	SHU	1 × 12	20 m (15 + 5)	20 s	A ^z	-	-	CR10: 6.0 ± 0.5 au	-	Δ B[La] _{post} : 2.0 to 8.6 mmol·L ⁻¹ ; B[La] ⁵ : 6.3 mmol·L ⁻¹ ; VO _{2avg} : 37.7 ± 7.1 mL·kg ⁻¹ ·min ⁻¹ (% VO _{2max} : 82.5 ± 14.9%); HR _{avg} : 173 ± 5 b·min ⁻¹ (% HR _{max} : 86 ± 2%)
Maggioni et al. [16]	SHU	3 × 6	40 m (20 + 20)	20 s	P	3 min P	-	CR10: 6.1 ± 2.7 au	-	-
Mancha-Triguero et al. [139]	STR	1 × 5	14 m	30 s	A	-	M, S _{best} : 2.48 ± 0.18 s; S _{avg} : 2.65 ± 0.16 s; S _{total} : 13.27 ± 0.83 s; F, S _{best} : 2.70 ± 0.16 s; S _{avg} : 2.99 ± 0.15 s; S _{total} : 14.98 ± 0.73 s	-	-	-
Marcelino et al. [256]	STR	1 × 12	20 m	20 s	A ^k	-	SSG 1, S _{best} : 3.20 ± 0.10 s; S _{avg} : 3.36 ± 0.10; S _{dec} : 5.3 ± 3.9%; SSG 2, S _{best} : 3.18 ± 0.07 s; S _{avg} : 3.37 ± 0.07 s; S _{dec} : 6.1 ± 3.3%	-	-	-
Matzenbacher et al. [257]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	PRE, S _{best} : 7.13 ± 0.26 s; S _{avg} : 7.49 ± 0.34 s; S _{dec} : 4.9 ± 1.7%; END, S _{best} : 7.15 ± 0.24 s; S _{avg} : 7.42 ± 0.27 s; S _{dec} : 3.8 ± 1.9%	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
McGawley & Andersson [258]	STR	1 × 6	30 m	On 20 s (~16 s)	P	-	Condition 1, S_{best} : 27.70 ± 0.50 s; S_{dec} : $4.7 \pm 1.6\%$; Condition 2, S_{best} : 26.70 ± 0.90 s; S_{dec} : $5.2 \pm 1.1\%$	-	-	-
Meckel et al. [259]	STR	1 × 6	30 m	30 s	P	-	PRE, S_{total} : 22.50 ± 0.60 s; S_{dec} : $2.9 \pm 0.3\%$; MID, S_{total} : 23.70 ± 0.63 s; S_{dec} : $2.3 \pm 0.2\%$; END, S_{total} : 23.51 ± 0.62 s; S_{dec} : $2.2 \pm 0.2\%$	-	-	-
Meckel et al. [260]	STR	1 × 12	20 m	On 20 s (~17 s)	P	-	S_{total} : 39.70 ± 0.60 s; S_{dec} : $5.0 \pm 0.5\%$	CR10: 6.9 ± 0.4 au	-	$\Delta \text{B[La]}^{2+}$: 2.0 ± 0.1 to 8.8 ± 0.7 mmol·L ⁻¹ ; HR _{peak} : 182 ± 2 b·min ⁻¹
Meckel et al. [261]	STR	1 × 6	40 m	On 30 s (~24 s)	P	-	S_{best} : 5.60 ± 0.26 s; S_{total} : 35.10 ± 1.50 s; S_{dec} : $4.8 \pm 1.9\%$	CR10: 4.9 ± 1.4 au	-	B[La]^{2+} : 11.3 ± 2.5 mmol·L ⁻¹ ; HR _{peak} : 179 ± 8 b·min ⁻¹
	STR	1 × 12	20 m	On 20 s (~17 s)	P	-	S_{best} : 3.10 ± 0.10 s; S_{total} : 38.80 ± 1.20 s; S_{dec} : $5.0 \pm 2.0\%$	CR10: 4.0 ± 1.3 au	-	B[La]^{2+} : 10.5 ± 1.8 mmol·L ⁻¹ ; HR _{peak} : 184 ± 8 b·min ⁻¹
Meckel et al. [262]	STR	1 × 6	30 m	30 s	P	-	S_{total} : 27.71 ± 1.40 s; S_{dec} : $1.6 \pm 0.7\%$	CR10: 5.4 ± 1.5 au	-	B[La]^{2+} : 10.1 ± 2.1 mmol·L ⁻¹ ; HR _{peak} : 171 ± 7 b·min ⁻¹
Meckel et al. [263]	STR	1 × 12	20 m	On 20 s (~17 s)	P	-	S_{total} : 37.80 ± 1.40 s; S_{dec} : $4.4 \pm 1.5\%$	CR10: 5.2 ± 1.3 au	-	B[La]^{2+} : 6.7 ± 1.1 mmol·L ⁻¹ ; HR _{peak} : 174 ± 9 b·min ⁻¹
Michalsik et al. [264]	STR	1 × 7	30 m	25 s	A ^Q	-	S_{best} : 4.09 ± 0.12 s; S_{avg} : 4.30 ± 0.13 s	-	-	-
Mohr et al. [265]	STR	1 × 5	30 m	25 s	A ^K	-	S_{avg} : 4.58 ± 0.15 s	-	-	-
Mohr et al. [266]	STR	1 × 5	30 m	25 s	A ^K	-	SEP, S_{best} : 4.34 ± 0.05 s; S_{avg} : 4.45 ± 0.05 s; SEM, S_{best} : 4.32 ± 0.06 s; S_{avg} : 4.41 ± 0.07 s	-	-	-
Mohr et al. [267]	STR	1 × 3	30 m	25 s	A ^K	-	S_{total} : 13.36 ± 0.11 s	-	-	-
Moncef et al. [268]	SHU	1 × 6	40 m (20 + 20)	On 20 s (~14 s)	P	-	S_{avg} : 6.38 ± 0.86 s	-	-	-
Morcillo et al. [48]	STR	1 × 12	30 m	30 s	P	-	S_{best} : 4.09 ± 0.05 s; S_{dec} : $3.7 \pm 1.5\%$	-	-	$\text{B[La]}_{\text{peak}}$: 9.5 ± 2.3 mmol·L ⁻¹
Moreira et al. [269]	STR	1 × 5	30 m	25 s	A ^Q	-	S_{total} : 4.65 ± 0.68 s	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Mujika et al. [164]	STR	1 × 6	30 m	On 30 s (~26 s)	A ^L	-	U17, S _{avg} : 4.43 ± 0.11 s; S _{total} : 26.61 ± 0.53 s; S _{dec} : 4.1 ± 1.1%; U18, S _{avg} : 4.39 ± 0.12 s; S _{total} : 26.34 ± 0.94 s; S _{dec} : 4.6 ± 1.1%	-	-	U17, B[La] _{peak} : 10.9 ± 1.7 mmol·L ⁻¹ ; U18, B[La] _{peak} : 12.3 ± 1.5 mmol·L ⁻¹
Müller et al. [270]	STR	1 × 6	35 m	10 s	P	-	-	-	Δ CMJ ^{AC} : 36.1 ± 5.7 to 34.4 ± 4.9 cm (-4.8%)	B[La] _{post} : 11.2 ± 4.4 mmol·L ⁻¹ ; B[La] ^S : 15.0 ± 3.9 HR _{peak} : 174 ± 20 b·min ⁻¹
Nakamura et al. [272]	SHU	1 × 6	30 m (15 + 15)	On 20 s (~15 s)	P	-	S _{best} : 5.62 ± 0.16 s; S _{avg} : 6.03 ± 0.18 s; S _{dec} : 7.4 ± 2.5%	-	-	B[La] ^{3'} : 10.6 ± 2.1 mmol·L ⁻¹ ; HR _{peak} : 180 ± 6 b·min ⁻¹
Nascimento et al [273]	SHU	1 × 8	40 m (10 + 20 + 10)	20 s (~14 s)	P	-	CON, S _{best} : 8.53 ± 0.34 s; S _{avg} : 9.09 ± 0.39 s; S _{dec} : 6.5 ± 1.1%; INT, S _{best} : 8.14 ± 0.18 s; S _{avg} : 8.53 ± 0.15 s; S _{dec} : 4.8 ± 0.8%	-	-	CON, B[La] _{peak} : 13.2 ± 2.7 mmol·L ⁻¹ INT, B[La] _{peak} : 16.2 ± 2.8 mmol·L ⁻¹
Nedrehagen & Saeterbakken [274]	SHU	1 × 6	40 m (20 + 20)	30 s	P	-	INT, S _{avg} : 7.79 ± 0.37 s CON, S _{avg} : 7.79 ± 0.5	-	-	-
Nikolaidis et al. [275]	STR	1 × 10	20 m	On 30 s (~27 s)	A ^Q	-	S _{best} : 3.14 ± 0.11 s; S _{avg} : 3.24 ± 0.11 s; S _{dec} : 3.4 ± 1.6%	-	-	-
Okuno et al. [271]	SHU	1 × 6	30 m (15 + 15)	On 20 s (~14 s)	P	-	S _{best} : 5.82 ± 0.15 s; S _{avg} : 6.06 ± 0.18; S _{dec} : 4.2 ± 1.1%	-	-	-
Padulo et al. [276]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	Test, S _{best} : 7.09 ± 0.18 s; S _{total} : 44.84 ± 1.09 s; S _{dec} : 5.5 ± 1.6%; Retest, S _{best} : 7.06 ± 0.15 s; S _{total} : 44.76 ± 1.09 s; S _{dec} : 5.7 ± 1.7%	Test, CR10: 7.2 ± 0.9 au; Retest, CR10: 7.2 ± 0.4 au	-	Test, B[La] ^{3'} : 11.3 ± 2.0 mmol·L ⁻¹ ; Retest, B[La] ^{3'} : 11.7 ± 1.7 mmol·L ⁻¹
Padulo et al. [277]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	Test, S _{best} : 6.97 ± 0.12 s; S _{total} : 43.76 ± 0.90 s; S _{dec} : 4.6 ± 1.5%; Retest, S _{best} : 7.03 ± 0.15 s; S _{total} : 44.08 ± 0.75 s; S _{dec} : 4.5 ± 1.1%	-	-	Test, B[La] ^{3'} : 11.6 ± 2.2 mmol·L ⁻¹ ; Retest, B[La] ^{3'} : 11.6 ± 2.1 mmol·L ⁻¹
Padulo et al. [114]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	Test, S _{best} : 5.81 ± 0.32 s; S _{total} : 60.19 ± 3.57 s; S _{dec} : 3.5 ± 1.7%; Retest, S _{best} : 5.82 ± 0.31 s; S _{total} : 60.50 ± 3.56 s; S _{dec} : 3.8 ± 1.6%;	Test, CR10: 7.8 ± 1.3 au; Retest, CR10: 8.0 ± 1.2 au	-	Test, B[La] ^{3'} : 11.9 ± 2.5 mmol·L ⁻¹ ; Retest, B[La] ^{3'} : 11.9 ± 2.1 mmol·L ⁻¹

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Padulo et al. [156]	SHU	1 × 10	30 m (10 + 10 + 10)	30 s	P	-	Test, S_{best} : 7.02 ± 0.44 s; S_{total} : 72.49 ± 4.82 s; S_{dec} : $3.3 \pm 1.3\%$; Retest, S_{best} : 7.01 ± 0.44 s; S_{total} : 72.51 ± 4.77 s; S_{dec} : $3.4 \pm 1.4\%$	Test, CR10: 7.8 ± 1.6 au; Retest, CR10: 8.1 ± 1.5 au	-	Test, $B[\text{La}]^{3'}$: 11.3 ± 2.8 mmol·L ⁻¹ ; Retest, $B[\text{La}]^{3'}$: 11.4 ± 2.5 mmol·L ⁻¹
	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	Test, S_{best} : 7.10 ± 0.20 s; S_{total} : 44.89 ± 1.14 s; S_{dec} : $5.5 \pm 1.9\%$; Retest, S_{best} : 7.09 ± 0.20 s; S_{total} : 44.79 ± 1.13 s; S_{dec} : $5.3 \pm 1.7\%$	Test, CR10: 7.0 ± 1.2 au; Retest, CR10: 7.2 ± 0.7 au	-	Test, $B[\text{La}]^{3'}$: 11.2 ± 2.1 mmol·L ⁻¹ ; Retest, $B[\text{La}]^{3'}$: 11.3 ± 2.0 mmol·L ⁻¹
	SHU	1 × 6	40 m (20 + 20)	20 s	A ^P	-	S_{best} : 7.16 ± 0.23 ; S_{total} : 45.77 ± 1.34 s; S_{dec} : $6.6 \pm 1.6\%$	CR10: 7.9 ± 1.2 au	-	$B[\text{La}]^{3'}$: 13.1 ± 2.1 mmol·L ⁻¹
Padulo et al. [150]	SHU	1 × 6	40 m (20 + 20)	15 s	P		S_{best} : 7.36 ± 0.10 s; S_{total} : 46.12 ± 0.85 s; S_{dec} : $4.5 \pm 1.2\%$	-	Δ CMJ ^{AA} : 39.2 cm to 35.6 ± 0.9 cm (-9.0%)	$B[\text{La}]^{3'}$: 14.5 ± 0.4 mmol·L ⁻¹
	SHU	1 × 6	40 m (20 + 20)	20 s	P		S_{best} : 7.35 ± 0.16 s; S_{total} : 45.41 ± 0.94 s; S_{dec} : $3.0 \pm 0.9\%$	-	Δ CMJ ^{AA} : 39.2 cm to 37.5 ± 2.7 cm (-4.3%)	$B[\text{La}]^{3'}$: 12.7 ± 1.2 mmol·L ⁻¹
	SHU	1 × 6	40 m (20 + 20)	25 s	P		S_{best} : 7.33 ± 0.13 s; S_{total} : 44.82 ± 0.90 s; S_{dec} : $1.9 \pm 0.7\%$	-	Δ CMJ ^{AA} : 39.2 cm to 38.3 ± 3.7 cm (-2.3%)	$B[\text{La}]^{3'}$: 8.0 ± 1.5 mmol·L ⁻¹
Paulauskas et al. [122]	SHU	3 × 10	30 m (15 + 15)	30 s	P	5 min P	S_{best} : set 1, 58.45 ± 1.63 s; set 2, 59.25 ± 2.03 s; set 3, 60.02 ± 2.41 s;	-	-	$B[\text{La}]^{3'}$: 13.02 ± 2.28 mmol·L ⁻¹ ; HR_{peak} : set 1, 175 ± 8 b·min ⁻¹ ; set 2, 178 ± 5 b·min ⁻¹ ; set 3, 182 ± 10 b·min ⁻¹ ; HR_{avg} : set 1, 163 ± 9.1 b·min ⁻¹ ; set 2, 169 ± 7 b·min ⁻¹ ; set 3, 169 ± 6 b·min ⁻¹
	SHU	3 × 20	15 m (7.5 + 7.5)	15 s	P	5 min P	S_{best} : set 1, 53.37 ± 1.64 s; set 2, 53.58 ± 1.48 s; set 3, 54.04 s	-	-	$B[\text{La}]^{3'}$: 8.5 ± 3.4 mmol·L ⁻¹ ; HR_{peak} : set 1, 174 ± 9 b·min ⁻¹ ; set 2, 178 ± 8 b·min ⁻¹ ; set 3, 179 ± 7 b·min ⁻¹ ; HR_{avg} : set 1, 161 ± 10 b·min ⁻¹ ; set 2, 170 ± 9 b·min ⁻¹ ; set 3, 171 ± 8 b·min ⁻¹
Perroni et al. [103]	MD ^A	1 × 7	30 m	25 s	A ^K	-	S_{avg} : 6.12 ± 0.04 s; S_{total} : 42.84 ± 1.96 s; S_{dec} : $3.7 \pm 1.2\%$	-	-	-
Petisco et al. [278]	SHU	1 × 6	30 m (15 + 15)	20 s	P	-	S_{best} : 5.77 ± 0.15 s; S_{total} : 35.70 ± 0.65 s	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Purkhús et al. [279]	STR	1 × 5	30 m	25 s	A ^K	-	CON, S _{avg} : 5.46 ± 0.38 s INT, S _{avg} : 5.64 ± 0.29 s	-	-	-
Pyne et al. [280]	STR	1 × 6	30 m	On 20 s (~16 s)	P	-	S _{total} : 25.83 ± 0.60 s; S _{dec} : 3.8 ± 1.1%	-	-	-
Ramírez-Campillo et al. [281]	STR	1 × 6	35 m	10 s	P	-	CON, S _{avg} : 7.35 ± 0.50 s; PLA, S _{avg} : 7.08 ± 0.60 s; INT, S _{avg} : 7.48 ± 1.00 s	-	-	-
Rampinini et al. [312]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	S _{best} : 7.00 ± 0.19 s; S _{avg} : 7.25 ± 0.17 s; S _{dec} : 3.3 ± 1.6%	-	-	-
Rampinini et al. [174]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	PRO, S _{best} : 6.86 ± 0.13 s; S _{avg} : 7.17 ± 0.09 s; S _{dec} : 4.5 ± 1.9%; AM, S _{best} : 6.97 ± 0.15 s; S _{avg} : 7.41 ± 0.19 s; S _{dec} : 6.0 ± 1.9%	-	-	-
Rodríguez-Fernández et al. [165]	STR	1 × 8	30 m	25 s	A	-	YTH, S _{best} : 4.03 ± 0.15 s; S _{avg} : 4.19 ± 0.12 s; S _{total} : 33.52 ± 0.97 s; S _{dec} : 3.9 ± 1.6% PRO, S _{best} : 3.92 ± 0.11 s; S _{avg} : 4.12 ± 0.12 s; S _{total} : 32.91 ± 0.91 s; S _{dec} : 5.2 ± 1.9%	-	-	-
Rodríguez-Fernández et al. [284]	STR	1 × 8	30 m	25 s	A ^K	-	S _{best} : 3.87 ± 0.04 s; S _{avg} : 4.03 ± 0.04 s; S _{total} : 32.26 ± 0.31 s; S _{dec} : 4.3 ± 0.3%	-	-	-
Rey et al. [283]	STR	1 × 6	25 m	25 s	A ^K	-	INT, S _{best} : 3.21 ± 0.08 s; S _{avg} : 3.29 ± 0.07 s; S _{total} : 19.77 ± 0.46 s; S _{dec} : 2.4 ± 1.5% CON, S _{best} : 3.15 ± 0.12 s; S _{avg} : 3.25 ± 0.15 s; S _{total} : 19.53 ± 0.95 s; S _{dec} : 3.1 ± 1.9%	-	-	-
Røksund et al. [285]	STR	1 × 8	30 m	On 30 s (~27 s)	P	-	S _{avg} : 3.14 ± 0.10 s	-	-	-
Ruscello et al. [286]	STR	1 × 7	30 m	1:5 ^N (~26 s)	P	-	S _{avg} : 5.24 ± 0.33 s	-	-	B[La] ³⁺ : 10.9 ± 1.8 mmol·L ⁻¹
	SHU	1 × 7	30 m (15 + 15)	1:3 ^N (~21 s)	P	-	S _{avg} : 6.84 ± 0.44 s	-	-	B[La] ³⁺ : 7.9 ± 2.4 mmol·L ⁻¹

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Ruscello et al. [104]	STR	1 × 7	30 m	1:5 ^N (~22 s)	P	-	S _{avg} : 4.53 ± 0.28 s; S _{dec} : 4.8%	-	Δ CMJ ^{AD} : 46.8 ± 4.5 to 43.3 ± 5.0 cm (-7.5%)	-
	SHU	1 × 7	30 m (15 + 15)	1:5 ^N (~30 s)	P	-	S _{avg} : 5.89 ± 0.35 s; S _{dec} : 3.4%	-	Δ CMJ ^{AD} : 46.9 ± 4.5 to 43.0 ± 5.1 cm (-8.3%)	-
	MD ^C	1 × 7	30 m (5 m per turn)	1:5 ^N (~42 s)	P	-	S _{avg} : 8.51 ± 0.41 s; S _{dec} : 2.5%	-	Δ CMJ ^{AD} : 46.9 ± 4.4 to 43.5 ± 5.0 cm (-7.1%)	-
Russell et al. [123]	STR	1 × 15	30 m	60 s	P	-	CON, S _{avg} : 4.34 ± 0.17 s; S _{total} : 65.08 ± 2.56 s; INT, S _{avg} : 4.37 ± 0.23 s; S _{total} : 65.56 ± 3.38 s	-	-	CON, Δ CK 24 h: 232 ± 44 u·L ⁻¹ to 785 ± 129 u·L ⁻¹ (238%); INT Δ CK 24 h: 232 ± 49 u·L ⁻¹ to 799 ± 141 u·L ⁻¹ (244%)
Salleh et al. [287]	MD ^C	1 × 5	40 m	60 s	A ^U	-	S _{avg} : 7.54 ± 0.65 s; S _{dec} : 1.9 ± 1.6%	-	-	-
Sánchez-Sánchez et al. [117]	SHU	1 × 6	40 m (20 + 20)	20 s	A	-	Sys1, S _{best} : 7.38 ± 0.25 s; S _{avg} : 7.93 ± 0.30 s; S _{total} : 47.55 ± 1.74 s; Sys2, S _{best} : 7.5 ± 0.26 s; S _{avg} : 7.97 ± 0.26 s; S _{total} : 47.85 ± 1.59 s; Sys3, S _{best} : 7.74 ± 0.29 s; S _{avg} : 8.24 ± 0.29 s; S _{total} : 49.46 ± 1.75 s; Sys4, S _{best} : 7.51 ± 0.32 s; S _{avg} : 8.02 ± 0.25 s; S _{total} : 48.14 ± 1.48 s	-	Sys1, Δ CMJ ^{AA} : 36.5 ± 4.4 to 28.3 ± 4.5 cm (-22.5%); Sys2, Δ CMJ ^{AA} : 35.5 ± 5.4 to 26.0 ± 4.9 cm (-26.1%); Sys3, Δ CMJ ^{AA} : 36.4 ± 5.7 to 26.5 ± 5.2 cm (-27.1%); Sys4, Δ CMJ ^{AA} : 36.9 ± 5.1 to 30.1 ± 5.9 cm (-18.5%)	Sys1, B[La] ^{1'} : 12.9 ± 2.3 mmol·L ⁻¹ ; B[La] ^{3'} : 13.0 ± 2.5 mmol·L ⁻¹ ; HR _{peak} 184 ± 13 b·min ⁻¹ ; Sys2, B[La] ^{1'} : 12.4 ± 2.4 mmol·L ⁻¹ ; B[La] ^{3'} : 13.0 ± 3.0 mmol·L ⁻¹ ; HR _{peak} 185 ± 12 b·min ⁻¹ ; Sys3, B[La] ^{1'} : 11.0 ± 2.3 mmol·L ⁻¹ ; B[La] ^{3'} : 11.0 ± 1.9 mmol·L ⁻¹ ; HR _{peak} 183 ± 13 b·min ⁻¹ ; Sys4, B[La] ^{1'} : 11.8 ± 2.5 mmol·L ⁻¹ ; B[La] ^{3'} : 11.1 ± 2.5 mmol·L ⁻¹ ; HR _{peak} 185 ± 12 b·min ⁻¹
Sánchez-Sánchez et al. [288]	STR	1 × 7	30 m	20 s	A	-	S _{avg} : 4.46 ± 0.17 s; S _{dec} : 4.7 ± 2.0%	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Sánchez-Sánchez et al. [289]	STR	1 × 6	20 m	20 s	P	-	S _{best} : 3.19 ± 0.11 s; S _{avg} : 3.29 ± 0.08 s	-	-	-
Sanders et al. [290]	STR	1 × 10	30 m	25 s	P	-	-	-	-	HR _{post} (% HR _{max}): 93%
Scanlan et al. [291]	STR	1 × 10	20 m	30 s	P	-	S _{total} : 35.02 ± 2.1 s; S _{dec} : 2.7 ± 1.2%	6–20: 15.2 ± 2.1	-	B[La] _{post} : 4.6 ± 0.8 to 11.0 ± 1.6 mmol·L ⁻¹ ; HR _{peak} : 169 ± 12 b·min ⁻¹
	STR	1 × 10	20 m	30 s	A ^{AG}	-	S _{total} : 37.73 ± 2.5 s; S _{dec} : 9.4 ± 5.2%	6–20: 18.4 ± 1.3 au	-	B[La] _{post} : 5.0 ± 1.1 to 16.5 ± 4.5 mmol·L ⁻¹ ; HR _{peak} : 187 ± 9 b·min ⁻¹
Scanlan et al. [292]	SHU	1 × 12	20 m ^{AE}	20 s	P	-	S _{dec} : 2.8 ± 0.8%	-	-	-
Selmi et al. [58]	STR	2 × 5	20 m	15 s	A ^J	1 min P	S _{best} : set 1, 3.31 ± 0.14 s; set 2, 3.38 ± 0.12 s; S _{total} : set 1, 16.97 ± 0.69 s; set 2, 17.69 ± 0.58 s; S _{dec} : Set 1, 2.9 ± 1.6%; Set 2, 5.1 ± 2.8%	CR10: 6.3 ± 1.4 au	-	△ B[La] ³⁺ : 1.8 ± 0.6 to 8.1 ± 2.2 mmol·L ⁻¹ HR _{peak} : 186 ± 14 b·min ⁻¹ HR _{avg} : 137 ± 12 b·min ⁻¹
	STR	2 × 5	20 m	15 s	A ^J	2 min P	S _{best} : set 1, 3.28 ± 0.10 s; set 2, 3.33 ± 0.11 s; S _{total} : set 1, 16.90 ± 0.57 s; set 2, 17.11 ± 0.47 s; S _{dec} : Set 1, 3.2 ± 1.6%; Set 2, 2.8 ± 1.6%	CR10: 3.2 ± 1.5 au	-	△ B[La] ³⁺ : 1.5 ± 0.2 to 8.2 ± 1.0 mmol·L ⁻¹ HR _{peak} : 182 ± 9 b·min ⁻¹ HR _{avg} : 125 ± 11 b·min ⁻¹
	STR	2 × 5	20 m	15 s	A ^J	4 min P	S _{best} : set 1, 3.31 ± 0.11 s; set 2, 3.31 ± 0.11 s; S _{total} : set 1, 16.97 ± 0.64 s; set 2, 17.06 ± 0.55 s; S _{dec} : Set 1, 2.7 ± 1.3%; Set 2, 3.1 ± 1.4%	CR10: 3.4 ± 1.2 au	-	△ B[La] ³⁺ : 1.6 ± 0.3 to 8.5 ± 1.8 mmol·L ⁻¹ HR _{peak} : 180 ± 10 b·min ⁻¹ HR _{avg} : 114 ± 5 b·min ⁻¹
Selmi et al. [293]	SHU	1 × 20	40 m (20 + 20)	20 s	P	-	INT, S _{best} : 7.53 ± 0.48 s; S _{total} : 47.86 ± 2.81 s; S _{dec} : 6.0 ± 1.9% CON, S _{best} : 7.69 ± 0.31 s; S _{total} : 49.05 ± 1.52 s; S _{dec} : 6.3 ± 2.0%	-	-	-
Shalfawi et al. [294]	STR	1 × 7	30 m	30 s	P	-	S _{best} : 4.93 ± 0.20 s; S _{avg} : 5.04 ± 0.20 s; S _{total} : 35.35 ± 1.40 s; S _{dec} : 2.2 ± 1.0%	-	-	-
Shalfawi et al. [295]	STR	1 × 10	40 m	60 s	P	-	INT, S _{avg} : 5.92 ± 0.26 s CON, S _{avg} : 5.84 ± 0.27 s	-	-	-
Shalfawi et al. [296]	STR	1 × 10	40 m	60 s	P	-	ATG, S _{avg} : 6.15 ± 0.4 s RS, S _{avg} : 6.19 ± 0.25 s	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Silva et al. [297]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	S _{best} : 6.44 ± 0.14 s; S _{avg} : 6.57 ± 0.26 s; S _{total} : 44.20 ± 0.40 s; S _{dec} : 9.8 ± 1.4%	-	-	-
Soares-Caldeira et al. [298]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	INT, S _{best} : 7.17 ± 0.37 s; S _{avg} : 7.62 ± 0.35 s; S _{dec} : 6.3 ± 2.0%; CON, S _{best} : 6.95 ± 0.16 s; S _{avg} : 7.49 ± 0.20 s; S _{dec} : 7.8 ± 4.3%	-	-	-
Spinetti et al. [299]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	CCT, S _{best} : 6.93 ± 0.15 s; S _{avg} : 7.43 ± 0.10; S _{dec} : 7.2 ± 2.2% TST, S _{best} : 7.11 ± 0.19 s; S _{avg} : 7.54 ± 0.23; S _{dec} : 6.1 ± 1.9%	-	-	-
Suarez-Arrones et al. [105]	MD ^{AF}	1 × 6	40 m (20 + 20)	20 s	P	-	RS, S _{best} : 7.60 ± 0.20 s; S _{avg} : 8.00 ± 0.20 s; S _{dec} : 5.3 ± 1.3%; SQ, S _{best} : 7.50 ± 0.30 s; S _{avg} : 7.90 ± 0.30 s; S _{dec} : 5.0 ± 2.0%	-	-	-
	SHU	3 × 6	40 m (20 + 20)	20 s	P	4 min P	-	6–20: 13.9 ± 0.4 au	-	-
Stojanovic et al. [300]	SHU	1 × 10	30 m (15 + 15)	30 s	P	-	S _{avg} : 5.77 ± 0.18 s; S _{dec} : 3.5 ± 1.1%	-	-	-
Taylor et al. [2]	STR	3–4 × 7	30 m	20 s	P	4 min P	-	-	-	HR _{peak} (% HRmax): 92 ± 5%
	SHU	3–4 × 7	30 m	20 s	P	4 min P	-	-	-	HR _{peak} (% HRmax): 89 ± 11%
Teixeira et al. [301]	STR	1 × 8	40 m	20 s	P	-	IT _{7.5} , S _{best} : 8.86 ± 0.25 s; S _{avg} : 9.39 ± 0.26 s; S _{dec} : 6.5 ± 1.4%; IT ₁₅ , S _{best} : 8.83 ± 0.36 s; S _{avg} : 9.33 ± 0.36 s; S _{dec} : 5.7 ± 3.2%	-	-	-
Thomassen et al. [302]	STR	1 × 10	20 m	15 s	A ^K	-	INT, S _{avg} : 3.35 ± 0.07 s; S _{total} : 33.44 ± 0.44 s; S _{dec} : 5.8 ± 1.0% NT, S _{avg} : 3.34 ± 0.09 s; S _{total} : 33.41 ± 0.32 s; S _{dec} : 5.9 ± 0.8%	-	-	-
Tønnessen et al. [303]	STR	1 × 10	40 m	60 s	-	P	INT, S _{avg} : 5.42 ± 0.18 s; CON, S _{avg} : 5.41 ± 0.19 s	-	-	-

Study	Exercise protocol			Outcomes						
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Torreblanca-Martínez et al. [304]	STR	1 × 12	30 m	30 s	P	-	S _{dec} : 6.5 ± 3.0%	6–20: 15.2 ± 2.5 au	-	HR _{post} : 179 ± 12 b·min ⁻¹
Tounsi et al. [176]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	M, S _{best} : 7.09 ± 0.24 s; S _{avg} : 7.32 ± 0.28; S _{dec} : 3.2 ± 1.2% F, S _{best} : 8.42 ± 0.47 s; S _{avg} : 8.85 ± 0.45; S _{dec} : 5.1 ± 2.5%	-	-	-
Trecroci et al. [305]	STR	1 × 5	30 m	25 s	P	-	SST, S _{best} : 4.26 ± 0.11 s; S _{total} : 21.94 ± 0.67 s; ARC, S _{best} : 4.25 ± 0.07 s; S _{total} : 21.91 ± 0.58 s	-	-	-
Turki et al. [111]	MD ^x	1 × 6	20 m (4 m per turn)	25 s	A ^K	-	PRO, S _{best} : 5.39 ± 0.18 s; S _{avg} : 5.52 ± 0.17 s; S _{total} : 33.09 ± 1.00 s; S _{dec} : 2.4 ± 1.0%; COL, S _{best} : 5.49 ± 0.26 s; S _{avg} : 5.62 ± 0.27 s; S _{total} : 33.70 ± 1.60 s; S _{dec} : 2.4 ± 0.6%	-	-	-
Ulupinar et al. [126]	STR	1 × 10	40 m	30 s	P	-	S _{best} : 5.43 ± 0.03 s; S _{total} : 56.7 ± 1.6 s; S _{dec} : 4.8 ± 1.7%	6–20: 17 ± 1 au	-	B[La] _{peak} : 18.6 ± 1.7 mmol·L ⁻¹ ; HR _{peak} : 184 ± 8 b·min ⁻¹ HR _{avg} : 164 ± 7 b·min ⁻¹
	STR	1 × 20	20 m	15 s	P	-	S _{best} : 3.18 ± 0.03 s; S _{total} : 67.3 ± 3.0 s; S _{dec} : 6.9 ± 2.8%	6–20: 19 ± 1 au	-	B[La] _{peak} : 16.6 ± 2.2 mmol·L ⁻¹ ; HR _{peak} : 188 ± 8 b·min ⁻¹ HR _{avg} : 168 ± 9 b·min ⁻¹
Ulupinar et al. [125]	STR	1 × 20	15 m	30 s	P	-	S _{total} : 49.9 ± 1.2; S _{dec} : 3.6 ± 1.8%	6–20: 11.5 ± 2.9 au	-	B[La] _{peak} : 9.1 ± 3.0 mmol·L ⁻¹ ; HR _{peak} : 186 ± 9 b·min ⁻¹ HR _{avg} : 168 ± 9 b·min ⁻¹
	STR	1 × 20	15 m	1:5 ^N (~12 s)	P	-	S _{total} : 52.7 ± 1.3; S _{dec} : 8.7 ± 2.8%	6–20: 16.3 ± 1.9 au	-	B[La] _{peak} : 14.9 ± 3.7 mmol·L ⁻¹ ; HR _{peak} : 190 ± 11 b·min ⁻¹ HR _{avg} : 178 ± 11 b·min ⁻¹
	STR	1 × 10	30 m	30 s	P	-	S _{total} : 44.9 ± 1.2; S _{dec} : 7.1 ± 3.8%	6–20: 13.9 ± 2.4 au	-	B[La] _{peak} : 15.0 ± 4.1 mmol·L ⁻¹ ; HR _{peak} : 191 ± 13 b·min ⁻¹ HR _{avg} : 172 ± 10 b·min ⁻¹
	STR	1 × 10	30 m	1:5 ^N (~22 s)	P	-	S _{total} : 45.8 ± 1.1; S _{dec} : 9.3 ± 2.3%	6–20: 15.8 ± 2.9 au	-	B[La] _{peak} : 16.9 ± 3.5 mmol·L ⁻¹ ; HR _{peak} : 190 ± 12 b·min ⁻¹ HR _{avg} : 177 ± 8 b·min ⁻¹
Van den Tillaar et al. [306]	STR	1 × 7	30 m	On 30 s (~25 s)	A ^K	-	S _{avg} : 5.46 ± 0.33 s	-	-	-

Study	Exercise protocol				Outcomes					
	RST Mode	Sets × Reps	Distance / Duration	Rest Time	Rest Mode	I-set Rest	Performance	Perceptual	Neuromuscular	Physiological
Vasquez-Bonilla et al. [307]	STR	1 × 8	20 m	20 s	A ^K	-	S _{best} : 3.81 ± 0.17 s; S _{avg} : 4.08 ± 0.21 s; S _{total} : 32.64 ± 1.75 s; S _{dec} : 7 ± 3%	-	-	-
Wadley & Le Rossignol [308]	STR	1 × 12	20 m	20 s	P	-	S _{total} : 39.31 ± 0.12 s; S _{dec} : 5.5 ± 3.3%	-	-	-
West et al. [309]	SHU	1 × 6	40 m (20 + 20)	20 s	P	-	S _{best} : 6.60 ± 0.16 s; S _{avg} : 6.87 ± 0.15 s; S _{total} : 41.23 ± 0.92 s	-	-	-
Woolley et al. [33]	STR	1 × 40	15m	30s	P ^R	-	-	6–20: 16.7 ± 1.8 au	-	△ CK 24 h: 279 ± 322 to 1121 ± 1362 u·L ⁻¹ (302%)
Yanci et al. [310]	STR	1 × 6	30 m	25 s	A	-	CON, S _{avg} : 4.57 ± 0.20 s PLY1: S _{avg} : 4.47 ± 0.22 s PLY2: S _{avg} : 4.45 ± 0.23 s	-	-	-
Zagatto et al. [106]	SHU	1 × 10	30m	30 s	P	-	S _{best} : 6.56 ± 0.30 s; S _{avg} : 6.84 ± 0.30 s; S _{total} : 68.40 ± 2.91 s; S _{dec} : 4.2 ± 1.8%	-	-	B[La] _{peak} : 9.8 ± 2.5 mmol·L ⁻¹ ; VO _{2avg} : 37.0 ± 2.9 ml·min ⁻¹ ·kg ⁻¹ ; HR _{peak} : 185 ± 9 b·min ⁻¹
	MD ^C	1 × 10	30 m (5 m per turn)	30 s	P	-	S _{best} : 8.14 ± 0.36 s; S _{avg} : 8.39 ± 0.36 s; S _{total} : 83.99 ± 3.60 s; S _{dec} : 3.0 ± 1.1%	-	-	B[La] _{peak} : 8.2 ± 1.9 mmol·L ⁻¹ ; VO _{2avg} : 36.1 ± 3.2 ml·min ⁻¹ ·kg ⁻¹ ; HR _{peak} : 186 ± 9 b·min ⁻¹
Zagatto et al. [311]	SHU	2 × 10	30 m (10 + 10 + 10)	30 s	P	P 5.50 min	Set 1, S _{best} : 6.85 ± 0.35 s; S _{avg} : 7.01 ± 0.31 s; S _{total} : 70.15 ± 3.07 s; S _{dec} : 2.4 ± 1.5% Set 2, S _{best} : 6.88 ± 0.32 s; S _{avg} : 7.13 ± 0.36 s; S _{total} : 71.31 ± 3.59 s; S _{dec} : 3.6 ± 1.58%	-	△ CMJ ^{AB} : 43.2 ± 9.7 to 37.6 ± 4.0 cm (-9.4 ± 18.0%)	-
Zagatto et al. [107]	MD ^C	1 × 10	30 m	30 s	P	-	S _{best} : 7.09 ± 0.57 s; S _{avg} : 7.30 ± 0.63 s; S _{total} : 72.84 ± 6.42 s	-	-	-

Data are presented as mean ± SD.

Abbreviations: I-set = inter-set; RST = repeated-sprint training; sRPE = session ratings of perceived exertion; au = arbitrary units; CR10 = category rating 0–10 rating of perceived exertion scale; 6–20 = 6–20 rating of perceived exertion scale; SHU = shuttle repeated-sprint; STR = straight-line repeated-sprint; MD = multi-directional repeated-sprint; A = active recovery; P = passive recovery; M = male; F = female; B[La]_{post} = blood lactate measured immediately post-exercise; B[La]_{peak} = highest blood lactate value measured from two or more time-points between 0–10 min post-exercise; B[La]^{1'} = blood lactate measured 1 minutes post-exercise; B[La]^{2'} = blood lactate measured 2 minutes post-exercise; B[La]^{3'} = blood lactate measured 3 minutes post-exercise; B[La]^{4'} = blood lactate measured 4 minutes post-exercise; B[La]^{5'} = blood lactate measured 5 minutes post-exercise; CK 24 h = serum creatine kinase measured 24 hours post-exercise S_{dec} = percentage sprint decrement; S_{avg} = average sprint time; S_{best} = best sprint time; S_{total} = total sprint time; CMJ = counter movement jump height; HR_{avg} = average heart rate; HR_{peak} = peak heart rate; HR_{post} = end-set heart rate recorded immediately post-exercise; % HR_{max} = percentage of maximal heart rate; VO_{2avg} = average oxygen consumption; % VO_{2max} = percentage of maximal oxygen consumption; V₀ = theoretical maximal velocity F₀ = theoretical maximal force; P₀ = theoretical maximal power; RF_{peak} = maximal ratio of force; D_{RF} = slope/rate of decrease in ratio of force with increasing velocity; K_{vert} vertical stiffness; K_{leg} = leg stiffness; ΔL = leg compression; Δz = centre of mass vertical displacement; F_{zmax} = maximal vertical force; PLA = placebo group = CON = control group; STR-G = straight-line repeated-sprints groups; SHU-G = shuttle repeated-sprints group; High = high VO₂ max group; Med = medium VO₂ max group; Low = low VO₂ max group; INT = intervention group; U17 = under 17 players; U18 = under 18 players; U19 = under 19 players;

U20 = under 20 players; PRE = pre-season; ELY = early/start of season; MID = mid-season; END = end/post of season; YTH = youth players; SEN = senior players; PRO = professional players; SEMI = semi-professional players; COL = college players; REP = representative players; Club = club players; AM = amateur players; EL = elite players; S-EL = sub-elite players; M-PRO = mid-professional players; EXP = experienced players; FSH = freshman players; FUT = futsal players; SOC = soccer players; SAN = sand training group; GRA = grass training group; NOR = normoxia group; HYP = hypoxia group; MG = Melanesian group; N-MG = non-Melanesian group; ARC = active recovery condition; SSG = small sided games group; SEM = speed endurance maintenance group; SEP = speed endurance production group; RS15 = repeated-sprint group with 15 s rest; RS30 = repeated-sprint group with 30 s rest; Sys1 = turf system 1; Sys2 = turf system 2; Sys3 = turf system 3; Sys4 = turf system 4; IT_{7.5} = interval training 7.5 seconds group; IT₁₅ = interval training 15 seconds group; RS = repeated sprint group; ATG = agility training group; 1TR = under 17 group born 1st tertile; 2TR = under 17 group born 2nd tertile; 3TR = under 17 group born 3rd tertile; Sham = sham group; RES = resisted sprint training group; PLY = plyometric group; PLY1 = plyometrics one day per week group; PLY2 = plyometrics two days per week group; LLTL = live low-train low group; IT₁₀₀ = interval training at 100% group; IT₈₆ = interval training at 86% group; SQ = squat group; TG = take-off group; PAS = passive recovery group; COL = cold water recovery group; CWT = contrast water therapy group; NT = Non-training group; ST = starting players; N-ST = non-starting players; N-SEL = non-selected players; SST = soccer specific training condition; Δ = change from baseline; - = not applicable.

^A 3 × multi-angle turns	^N Exercise to rest ratio	^Y Run at 35% maximal aerobic speed
^B 4 × multi-angle turns	^O Walking or running to maintain 60-65% of HR maximum	^Z Run at 50% maximal aerobic speed
^C 5 × multi-angle turns	^P 3 × counter-movement jumps following each sprint	^{AA} Measured via an Optojump
^D 2 × 45° turns	^Q Self-paced jogging	^{AB} Measured via force-platforms
^E 2 × 90° turns	^R Short enforced deceleration zone (<10m)	^{AC} Measured via a contact mat
^F 2 × 135° turns	^S Run at 6 km·h ⁻¹	^{AD} Measured via FreePower Jump
^G 4 × 45° turns	^T 4 × 90° turns (quadrangle)	^{AE} Repeated 5-0-5 Agility test: total rep distance = 20 m, timed distance = 10 m
^H Run at 8 km·h ⁻¹ back to one way start line	^U Walk for 40 s, stationary rest for 20 s	^{AF} Change of direction performed around a cone
^I Light stretching	^V 4 × 100° turns	^{AG} Run at 50% maximal speed
^J 10 m deceleration zone + 10m run zone at either end	^W 10m zone at both ends to decelerate, then jog back to two-way start line.	
^K Jog back to one way start line	^X Run at 20% maximal aerobic speed	
^L Jogging at 2–2.1 m·s ⁻¹		
^M Single counter-movement jump following each sprint		

Supplementary Table S4. Influence of programming variables on the variance of meta-analysed acute physiological, perceptual and performance demands of repeated-sprint training in team sport athletes.

		Total Variance (σ^2)		Variance Explained by Moderators (R_{2META})
		Observed (no moderators)	With Moderators	
HR_{avg}	b·min ⁻¹	335	-	-
	% HR _{max}	19	-	-
HR_{peak}	b·min ⁻¹	59	55	0.07
VO_{2avg}	ml·kg ⁻¹ ·min ⁻¹	89.6	-	-
B[La]	mmol·L ⁻¹	9.3	6.3	0.32
sRPE	au (deciMax)	3.1	3.0	0.03
S_{best}	s	2.71	1.10	0.60
S_{avg}	s	2.68	0.69	0.74
S_{dec}	%	4.8	3.5	0.27

Dashed lines indicate outcome measure where moderator analysis could not be performed.