Dr James Steele, Associate Professor of Sport and Exercise Science - CV

Tel (work): +44(0)2382 016465 or +44(0)2081 589736 - Tel (mobile): +44(0)7878127785

Email: jamessteele@ukactive.org.uk; james.steele@solent.ac.uk
Research Gate: https://www.researchgate.net/profile/James Steele4;

 $Google\ Scholar: \underline{https://scholar.google.co.uk/citations?user=kvSD7D4AAAAJ\&hl=en\&oi=ao;}$

Open Science Framework: https://osf.io/vjrqk/

Twitter: @jamessteeleii

James is Associate Professor of Sport and Exercise Science at Solent University, and Director of Steele Research Limited. He has extensive research and consultancy experience in physical activity, exercise, and sport; working with elite athletes across a range of sports, the general population across the lifespan, and both those who are healthy and diseased. His experiences are varied and interdisciplinary with a focus on problem solving across domains; as such he has expertise in a wide range of research methodologies, study designs, and both quantitative, qualitative, and mixed method approaches to data analysis and synthesis. James has led across numerous large research projects both within academia and the public and private sectors, published and provided invited talks across a range of areas relating to physical activity, exercise, and sport, served on a number of national expert panels and working groups, is an editor and reviewer for several journals, and has been involved in the founding of se veral societies within the field.

Education

Post Graduate Education - Southampton Solent University

2010-2014 PhD - Isolated Lumbar Extension Resistance Exercise as an Intervention for Chronic Low Back Pain

2010-2011 Post Graduate Certificate in Research Methods

2011-2012 PDU in Enhancing Teaching and Learning in Higher Education

<u>University – Southampton Solent University</u>

2007-2010 BSc (Hons) Applied Sport Science

Full time degree 1st class with honours

Employment/Work Experience

Employer:	Steele Research Limited
Dates:	January 2021 – Present
Job Title:	Director
Employer:	Solent University, Faculty of Sport, Health, and Social Sciences
Dates:	May 2016 - Present
Job Title:	Associate Professor – Sport and Exercise Science
Employer:	ukactive Research Institute
Dates:	January 2018 - March 2021
Job Title:	Principal Investigator
Employer:	Southampton Solent University, Research and Innovation Office
Dates:	October 2015 - October 2016
Job Title:	Research and Innovation Fellow (Sport, Health and Wellbeing Hub Lead)
Employer:	Southampton Solent University, School of Sport, Health, and Social Sciences
Dates:	July 2014 – May 2016
Job Title:	Lecturer – Applied Sport Science
Employer:	Southampton Solent University, Centre for Health, Exercise, and Sport Science
Dates:	October 2011 – August 2013
Job Title:	Associate Lecturer - Sport and Exercise
Employer:	Southampton Solent University, Centre for Health, Exercise, and Sport Science
Dates:	March 2010 – October 2010
Job Title:	Research & Laboratory Assistant (Part Time)

Peer Reviewed Publications¹

*undergraduate student co-author; †postgraduate (MSc) student co-author; ‡postgraduate (PhD) student co-author at time of publication

- Giessing, J., B. Eichmann, W. Kemmler, W. L. Westcott, R. Winett, K. Busuttil, <u>J. Steele</u>, and J. Fisher, 2021. The effects of adding high intensity of effort resistance training to routine care in persons with type II diabetes: an exploratory randomised comparative interrupted time-series study. *Physiology and Behaviour*. 245, 113677
- <u>Steele, J.</u>, D. Plotkin, D. Van Every, A. Rosa, H. Zambrano, B. Mendelovits, M. Mercado, J. Grgic, and B. J. Schoenfeld, 2021. Slow and steady, or hard and fast? A meta-analysis of studies comparing body composition changes between interval training and moderate intensity continuous training. *Sports*. 9(11), 155

¹ As a signatory of the San Francisco Declaration on Research Assessment I have deliberately omitted individual Impact Factors of journals for outputs listed, and not reported here any other metrics such as h-index or i10-index. If these metrics are desired, they can be easily located online (e.g., Google Scholar profile). Though I would discourage assessment based upon these alone. The only additional indications on publications are where co-authors were students.

- Silva, M. H., C. A. B. de Lira, <u>J. Steele</u>, J. P. Fisher, J. F. Mota, A. C. Gomes, and P. Gentil, 2021. Cycle ergometer training and resistance training similarly increase muscle strength in trained men. *Journal of Sport Sciences*. Epub ahead of print.
- Halperin, I., †T. Malleron, †I. Har Nir, ‡P. Androulakis-Korakakis, ‡M. Wolf, J. Fisher, <u>J. Steele</u>, 2021. Accuracy in predicting repetitions to task failure in resistance exercise: a scoping review and exploratory meta-analysis. Sports Medicine. In Press
- Behm, D., S. Alizadeh, S. Hadjizedah, C. Hanlon, E. Ramsay, M.M.I. Mahmoud, J. Witten, J. P. Fisher, O. Prieske, H. Chaabene, U. Granacher, and <u>J. Steele</u>, 2020. Non-local muscle fatigue effects on muscle strength, power, and endurance in healthy individuals: A systematic review and meta-analysis. *Sports Medicine*. 51, 1893-1907
- ‡Androulakis-Korakakis, P., N. Michalopoulos, J. P. Fisher, J. Keogh, J. P. Loenneke, E. Helms, ‡M. Wolf, G. Nuckols, and <u>J. Steele</u>, 2021. The minimum effective training dose required for 1RM strength in powerlifters. *Frontiers in Sports and Active Living*. 3, 248
- Schoenfeld, B., J. Fisher, J. Grgic, C. Haun, E. Helms, S. Phillips, <u>J. Steele</u>, and A. Vigotsky, 2021. Resistance training recommendations to maximize muscle hypertrophy in an athletic population: Position stand of the IUSCA. *International Journal of Strength and Conditioning*. 1(1), https://doi.org/10.47206/ijsc.v1i1.81
- Moore, J., Z. Merchant, K. Rowlinson, K. McEwan, M. Evison, G. Faulkner, J. Sultan, J. S. McPhee, and <u>J. Steele</u>, 2021.
 Implementing a system-wise cancer prehabilitation programme: Greater Manchester's 'Prehab4Cancer'. *European Journal of Surgical Oncology*. 47(3, Pt A), 524-532
- *Budzynski-Seymour, E., K. Milton, H. Mills, M. Wade, C. Foster, D. Vishnubala, B. Baxter, C. Williamson, and <u>J. Steele</u>, 2021. A rapid review of communication strategies for physical activity guidelines and physical activity promotion: A review of worldwide strategies. *Journal of Physical Activity and Health*. 18(8), 1014-1027
- Steele, J., ‡P. Androulakis-Korakakis, L. Carlson, D. Williams, S. Phillips, D. Smith, B. Schoenfeld, J. Loenneke, R. Winett, T. Abe, S. Dufour, M. Franchi, F. Sarto, T. Lundberg, P. Gentil, T. Kvorning, J. Giessing, M. Sedliak, A. Paoli, F. Spotswood, A. Lucas, and J. Fisher, 2021. The impact of coronavirus (COVID-19) related public-health measures on training behaviours of individuals previously participating in resistance training: A cross-sectional survey study. *Sports Medicine*. 51, 1335-1351
- Oliver, E. J., B. Buckley, C. J. Dodd-Reynolds, J. Downey, C. Hanson, H. Henderson, J. Hawkins., <u>J. Steele</u>, M. Wade, and P. M. Watson, 2021. Where next for design, delivery, and evaluation of community-based physical activity prescription? Emerging lessons from the United Kingdom. *Applied Physiology Nutrition and Metabolism*. Epub ahead of print
- Latella, C., C. Peddle-McIntyre, C., †L. Marcotte, <u>J. Steele</u>, K. Kendall, and C. Fairman, 2021. Strengthening the case for cluster set resistance training in aged and clinical settings: Emerging evidence, proposed benefits and suggestions. *Sports Medicine*. 51, 1335-1351
- ‡Budzynski-Seymour, E., M. Jones, and <u>J. Steele</u>, 2021. Can Earth's mightiest heroes help children be physically active?
 Exploring the immersive qualities of Les Mills' and Marvel's "Move Like the Avengers" video. *International Journal of Environmental Research and Public Health*. 18(13), 7184
- Wade, M., N. Brown, <u>J. Steele</u>, S. Mann, B. Dancy, S. Winter, and A. Majumdar, 2021. The impact of signposting and group support pathways on a community-based physical activity intervention grounded in motivational interviewing. *Journal of Public Health*. Epub ahead of print
- <u>Steele, J., M.</u> Wade, R. J. Copeland, S. Stokes, R. Stokes, and S. Mann, 2021. The National ReferAll Database: An open dataset of exercise referral schemes across the UK. *International Journal of Environmental Research and Public Health*. 18(6), 4831
- ‡Budzynski-Seymour, E., M. Jones, and <u>J. Steele</u>, 2021. The influence of Public Health England's Change4Life Disney branded 10-minute shake ups on children's post activity affective response. *Communications in Kinesiology*. 1(2)
- Mackintosh, K. A., M. A. McNarry, S. Berntsen, <u>J. Steele</u>, E. Sejersted, and T. Westergren, 2021. Physical Activity and Sedentary Time in Children and Adolescents with Asthma: A Systematic Review and Meta-analysis. *Scandinavian Journal* of Medicine and Science in Sports. Epub ahead of print
- Kemmler, W., M. Shojaa, <u>J. Steele</u>, J. Berger, M. Fröhlich, D. Schoene, S. Von Stengel, H. Kleinöder, and M. Kohl, 2021. Efficacy of whole-body electromyostimulation (WB-EMS) on body composition and muscle strength in non-athletic adults: A systematic review and meta-analysis. *Frontiers in Physiology*. 12, 640657
- ‡Willinger, N., <u>J. Steele</u>, L. Atkinson, G. Liguori, A. Jimenez, S. Mann, and E. Horton, 2021. Effectiveness of structured physical activity (PA) interventions through the evaluation of PA levels, adoption, retention, maintenance, and adherence rates A systematic review and meta-analysis. *Journal of Physical Activity and Health*. 18(1), 116-129
- ‡Rowley, N., <u>J. Steele</u>, S. Mann, A. Jimenez, and E. Horton, 2021. Delivery approaches within exercise referral schemes: a survey of current practice in England. *Journal of Physical Activity and Health*. 18(4), 357-373
- †Armes, C., *H. Standish-Hunt, ‡P. Androulakis-Korakakis, †N. Michalopoulos, *T. Georgieva, *A. Hammond, J. Fisher, P. Gentil, J. Giessing, <u>J. Steele</u>, 2020. "Just one more rep!"- Ability to predict proximity to momentary failure in resistance trained persons. *Frontiers in Psychology*. 11:565416
- †Mason, L., A. Kirkland, J. Wright, and <u>J. Steele.</u> 2020. The Relationship between Isometric Mid-Thigh Pull Variables and Athletic Performance Measures: Empirical Study of English Professional Soccer Players and Meta-analysis of Extant Literature. *Journal of Sports Medicine and Physical Fitness*. Epub ahead of print
- Zenko, Z., <u>J. Steele</u>, and J. Mills, 2020. Communications in Kinesiology: A new open access journal from the Society for Transparency, Openness, and Replication in Kinesiology. *Communications in Kinesiology*. 1(1), 1-3
- Gentil, P., E. ‡Budzynski-Seymour, D. Souza, J. Steele, J. Fisher, and M. Bottaro, 2020. Evaluating the results of resistance training using ultrasound or flexed arm circumference: a case for keeping it simple? Journal of Clinical and Translational Research. Epub ahead of print

- Sorbie, G. G., A. K. Richardson, J. Glen, S. Hardie, S. Taliep, M. Wade, L. Broughton, S. Mann, <u>J. Steele</u>, and D. Lavallee,
 2020. The association of golf participation with health and wellbeing: A comparative study. *International Journal of Golf Science*. Epub ahead of print
- <u>Steele, J.,</u> J. Fisher, and D. Crawford, 2020. Does increasing an athletes' strength improve sports performance? A critical review with suggestions to help answer this, and other, causal questions in sport science. *Journal of Trainology*. 9(1), 20-32
- *Waller, G., †M. Dolby, <u>J. Steele</u>, and J. Fisher, 2020. A low caffeine dose improves maximal strength, but not relative muscular endurance in either heavier- or lighter-loads, or perceptions of effort or discomfort at task failure in females. *PeerJ*. 8, e9144
- Grigoletto, G., G. Marcolin, E. Borgatti, F. Zonin, <u>J. Steele</u>, P. Gentil, L. Galvao, and A. Paoli, 2020. Kettlebell training for female ballet dancers: effects on lower limb power and body balance. *Journal of Human Kinetics*. 74, 15-22 (IF = 1.664)
- Nuzzo, J. L., and <u>J. Steele</u>, 2020. parkrun and the claim of "elitism" in paid-entry run/walk events. *American Journal of Health Promotion*. Epub ahead of print
- Martino, E., J. Fisher, B. Wink, D. Smith, and <u>J. Steele</u>, 2020. The 'Lift Big-Get Big' culture: Impact of images of hypermuscular bodies and training information upon resistance training beliefs in males. *Research Quarterly in Sport and Exercise*. Epub ahead of print
- Caldwell, A. R., A. D. Vigotsky, M. S. Tenan, R. Radel, D. T. Mellor, A. Kreutzer, I. M. Lahart, J. P. Mills, M. P. Boisgontier,
 Consortium for Transparency in Exercise Science (COTES) Collaborators,
 2020. Moving sport and exercise science forward: A call for the adoption of more transparent research practices. Sports Medicine.
- ‡Budzynski-Seymour, E., *R. Conway, M. Wade, A. Lucas, M. Jones, S. Mann, and <u>J. Steele</u>, 2020. Physical activity, mental and personal wellbeing, social isolation, and perceptions of academic attainment and employability in university students: Pooled analysis of the Scottish and British Active Student Surveys. *Journal of Physical Activity and Health*. 17(6), 610-620
- ‡Rowley, N., <u>J. Steele</u>, M. Wade, R. Copeland, S. Mann, G. Liguori, E. Horton, and A. Jimenez, 2020. Are exercise referral schemes effective in increasing physical activity levels? Observational findings using individual patient data meta-analysis from The National Referral Database. *Journal of Physical Activity and Health*. 17(6), 621-631
- ‡Perrin, C., D. Smith, and <u>J. Steele</u>, 2020. Estimates of stress between the hamstring muscles. *Muscle, Ligaments, and Tendons Journal*. 10(3), 436-441
- †Farrow, J., <u>J. Steele</u>, M. Skivington, D. Behm, and J. P. Fisher, 2020. Lighter-load exercise produces greater acute- and prolonged-fatigue in exercised and non-exercised limbs. *Research Quarterly in Sport and Exercise*. Epub ahead of print
- <u>Steele, J.,</u> S. Bruce-Low, D. Smith, D. Jessop, and N. Osborne, 2020. Isolated lumbar extension resistance training improves strength, pain, and disability, but not spinal height or shrinkage ('creep') in participants with chronic low back pain. *Cartilage*. 11(2), 160-168
- Fisher, J. P., <u>J. Steele</u>, ‡P. Androulakis-Korakakis, D. Smith, P. Gentil, and J. Giessing, 2020. The strength-endurance continuum revisited: a critical commentary of the recommendation of different loading ranges for different muscular adaptations. *Journal of Trainology*. 9(1), 1-8
- Nuzzo, J., and <u>J. Steele</u>, 2020. Time for a causal system map of physical activity. *Bulletin of the World Health Organization*. 98(3), 224-225
- Jones, M., E. Defever, A. Letsinger, <u>J. Steele</u>, and K. A. Mackintosh, 2020. A mixed studies narrative review of school-based interventions to promote physical activity and/or reduce sedentary time in children. *Journal of Sport and Health Science*. 9(1), 3-17
- ‡Androulakis-Korakakis, P., J.P. Fisher, and <u>J. Steele</u>, 2020. The minimum effective training dose required to increase 1RM strength in resistance-trained men: A systematic review and meta-analysis. *Sports Medicine*. 50, 751-765
- Wade, M., S. Mann, R. J. Copeland, and <u>J. Steele</u>, 2019. Effect of exercise referral schemes upon health and wellbeing: Initial observational insights using individual patient data meta-analysis from The National Referral Database. *Journal of Epidemiology and Community Health*. 74(1), 32-41
- <u>Steele, J.,</u> ‡P. Androulakis-Korakakis, ‡C. Perrin, J. P. Fisher, P. Gentil, C. Scott, and A. Rosenberger, 2019. Comparisons of resistance training and "cardio" exercise modalities as countermeasures to microgravity induced physical deconditioning: New perspectives and lessons learned from terrestrial studies. *Frontiers in Physiology*. 10, 1150
- *Hammond, A., ‡C. Perrin, <u>J. Steele</u>, J. Giessing, P. Gentil, and J. P. Fisher, 2019. The effects of a 4-week mesocycle of barbell back squat or barbell hip thrust strength training upon isolated lumbar extension strength. *PeerJ*. 7, e7337
- Monteiro, E. R., J. L. Vingren, V. G. Correa Neto, E. B. Neves, <u>J. Steele</u>, and J. S. Noaves, 2019. Effects of different between test rest intervals in reproducibility of the 10-repetitions maximum load test: A pilot study with recreationally resistance trained men. *International Journal of Exercise Science*. 12(4), 932-940
- *Goncalves, A., P. Gentil, <u>J. Steele</u>, J. Giessing, and J. P. Fisher, 2019. Comparison of single- and multi-joint lower body resistance training upon strength increases in recreationally active males and females: a within-participant unilateral training study. *European Journal of Translational Myology*. 29(1), 8052
- *Griffiths, B., J. Grant, L. Langdown, P. Gentil, J. Fisher, and <u>J. Steele</u>, 2019. The effect of in-season traditional and explosive resistance training programmes on strength, jump height, and speed in recreational soccer players. *Research Quarterly in Exercise and Sport*. 90(1), 95-102
- dos Santos, W. D. N., C. A. Vieira, M. Bottaro, V. A. Nunes, R. Ramirez-Campillo, <u>J. Steele</u>, J. P. Fisher, and P. Gentil, 2019.
 Resistance training performed to failure or not to failure result in similar total work, but with different fatigue and discomfort levels. *Journal of Strength and Conditioning Research*. Epub ahead of print

- Mann, S., M. Wade, M. Jones, G. Sandercock, C. Beedie, and <u>J. Steele</u>, 2019. One-year surveillance of body mass index and cardiorespiratory fitness in primary school children in north west England and the impact of school deprivation level.
 Archives of Disease in Childhood. Epub ahead of print
- Monteiro, E., J. Novaes, T. Cavanaugh, B. J. Hoogenboom, <u>J. Steele</u>, J. K. Vingren, and J. Škarabot, 2019. Quadriceps foam rolling and rolling massage increases hip flexion and extension passive range-of-motion. *Journal of Bodywork and Movement Therapies*. 23(3), 575-580
- Monteiro, E., P. B. Costa, V. G. C. Neto, B. J. Hoogenboom, <u>J. Steele</u>, and J. Novaes, 2019. Posterior thigh foam rolling increases knee extension fatigue and passive shoulder range of motion. *Journal of Strength and Conditioning Research*. 33(4), 987-994
- ‡Budzynski-Seymour, E., M. Wade, R. Lawson, A. Lucas, and <u>J. Steele</u>, 2019. Heart rate, energy expenditure, and affective responses from children participating in trampoline park sessions compared with traditional extra-curricular sports clubs. *Journal of Sports Medicine and Physical Fitness.* 59(10), 1747-1755
- Carlson, L., B. Jonker, W. Westcott, <u>J. Steele</u>, and J. Fisher, 2019. Neither repetition duration, nor number of muscle actions affect strength increases, body composition, muscle size or fasted blood glucose in trained males and females. *Applied Physiology, Nutrition, and Metabolism.* 44(2), 200-207
- Fisher, J. P., *C. Stuart, <u>J. Steele</u>, P. Gentil, and J. Giessing, 2018. Heavier- and lighter-load isolated lumbar extension resistance training produce similar strength increases, but different perceptual responses, in healthy males and females. *PeerJ*. 6, e6001
- ‡Rowley, N. Z., S. Mann, <u>J. Steele</u>, E. Horton, and A. Jimenez, 2018. The effects of exercise referral schemes in the United Kingdom in those with cardiovascular, mental health, and musculoskeletal disorders: A preliminary systematic review. *BMC Public Health*. 18(1), 949
- Mann, S., M. Wade, J. Fisher, J. Giessing, P., Gentil, and <u>J. Steele</u>, 2018. Phase angle as an indicator of health and fitness in patients entering an exercise referral scheme. *Journal of the American Medical Directors Association*. 19(9), 809-810
- Vale, A. F., J. A. Carneiro, P. C. Jardim, T. V. Jardim, <u>J. Steele</u>, J. P. Fisher, and P. R. V. Gentil, 2018. Acute effects of resistance training load on the cardiac autonomic modulation in hypertensive women. *Journal of Translational Medicine*. 16(1), pp 240
- Steele, J, and J. Fisher, 2018. Effort, discomfort, group III/IV afferents, bioenergetics, and motor unit recruitment. *Medicine* and Science in Sport and Exercise. 50(8), pp 1718
- ‡Androulakis-Korakakis, P., J. P. Fisher, P. Kolokotronis, P. Gentil, and <u>J. Steele</u>, 2018. Reduced volume 'daily max' training compared to higher volume periodized training in powerlifters preparing for competition A pilot study. *Sports*. 6(3), pp. 86
- ‡Androulakis-Korakakis, P., P. Gentil, J. Fisher, and <u>J. Steele</u>, 2018. Comparison of isolated lumbar extension strength in competitive and non-competitive powerlifters, and recreationally trained males. *Journal of Strength and Conditioning Research*. Epub ahead of print
- Gentil, P., J. Fisher, <u>J. Steele</u>, M. H. Campos, M. H. Silva, A. Paoli, J. Giessing, and M. Bottaro, 2018. Effects of equal-volume resistance training with different training frequencies in muscle size and strength in trained men. *PeerJ*. 6, pp e5020
- Fisher, J., <u>J. Steele</u>, D. Smith, and P. Gentil, 2018. Periodization for optimizing strength and hypertrophy; the forgotten variables. *Journal of Trainology*. 7, pp 10-15
- *Conway, R., *J. Behennah, J. Fisher, N. Osborne, and <u>J. Steele</u>, 2018. A comparison of isolated lumbar extension strength between healthy asymptomatic participants and chronic low back pain subjects without previous lumbar spine surgery. *Spine*. 43(20, E1232-E1237
- Souza, D. C., R. B. Viana, V. S. Coswig, J. P. Fisher, <u>J. Steele</u>, and P. Gentil, 2018. Comment on: Volume for muscle hypertrophy and health outcomes: The most effective variable in resistance training. *Sports Medicine*. 48(5), pp 1281-1284
- Mann, S., A. Jimenez, <u>J. Steele</u>, S. Domone, M. Wade, and C. Beedie, 2018. Programming and supervision of resistance training leads to positive effects on strength and body composition: Results from two randomised trials of community fitness programmes. *BMC Public Health*. 18(1), 420
- *Stuart, C., <u>J. Steele</u>, P. Gentil, J. Giessing, and J. Fisher, 2018. Fatigue and perceptual responses of heavier- and lighter-load isolated lumbar extension resistance exercise in males and females. *PeerJ.* 6, pp e4523
- Gentil, P., V. A. Marques, J. P. P. Neto, A. C. G. Santos, <u>J. Steele</u>, J. Fisher, A. Paoli, and M. Bottaro, 2018. Using velocity loss for monitoring resistance training effort in a real world setting. *Applied Physiology, Nutrition, and Metabolism.* 43(8), 833-837
- Steele, J., *A. Butler, *Z. Comerford, *J. Dyer, *N. Lloyd, *J. Ward, J. Fisher, P. Gentil, C. Scott, and H. Ozaki, 2018. Similar acute responses from effort and duration matched leg press and recumbent cycling tasks. *PeerJ.* 6, pp e4403
- *Behennah, J., *R. Conway, J. Fisher, N. Osborne, <u>J. Steele</u>, 2018. The relationship between balance performance, lumbar extension strength, trunk extension endurance, and pain in participants with chronic low back pain, and those without. *Clinical Biomechanics*. 53, 22-30
- <u>Steele, J., J. Fisher, ‡C. Perrin, *R. Conway, S. Bruce-Low, and D. Smith, 2018. Does Change in Isolated Lumbar Extensor Muscle Function Correlate with Good Clinical Outcome? A Secondary Analysis of Data on Change in Isolated Lumbar Extension Strength, Pain and Disability in Chronic Low Back Pain. *Disability and Rehabilitation*. 41(11), 1287-1295</u>

- *Androulakis-Korakakis, P., L. Langdown, A. Lewis, J. Fisher, P. Gentil, A. Paoli, and <u>J. Steele</u>, 2018. Effects of modality during additional "high-intensity interval training" upon aerobic fitness and strength in powerlifting and strongman athletes. *Journal of Strength and Conditioning Research*. 32(2), pp 450-457
- Monteiro, E. R., <u>J. Steele</u>, J. S. Noaves, A. F. Brown, M. T. Cavanaugh, J. L. Vingren, and D. Behm, 2017. Men exhibit greater fatigue resistance than women in alternated bench press and leg press exercises. *Journal of Sports Medicine and Physical Fitness*. 59(2), 238-245
- <u>Steele, J., A.</u> Endres, J. Fisher, P. Gentil, and J. Giessing, 2017. Ability to predict repetitions to momentary failure is not perfectly accurate, though improves with resistance training experience. *Peer J.* e4105
- *Wash, K., S. Burnet, and <u>J. Steele</u>, 2017. Brace yourselves, winter is coming: a pilot study of the effects of brief, infrequent cold water immersion upon body composition in young adult males. *Journal of Evolution and Health*. 2(2), 1-14
- Carlson, L., J. P. Fisher, and <u>J. Steele</u>, 2017. Letter to the editor; Resistance training and its impact on psychological health in participants of corporate wellness programs. *International Journal of Sport, Exercise and Health Research*. 1(2), 54-55
- Grainer, A., L. Zerbini, C. Reggiani, G. Marcolin, <u>J. Steele</u>, and A. Paoli, 2017. Physiological and perceptual responses to Nordic Walking in a natural mountain environment. *International Journal of Environmental Research and Public Health*. 14(10),1235
- <u>Steele, J., J. Fisher, S. Bruce-Low, D. Smith, N. Osborne, and D. Newell, 2017. Variability in strength, pain, and disability changes in response to an isolated lumbar extension resistance training intervention in participants with chronic low back pain. *Healthcare.* 5(4), e75</u>
- *Bimson, L., L. Langdown, J. P. Fisher, and <u>J. Steele</u>, 2017. Six weeks of knee extensor isometric training improves soccer related skills in female soccer players. *Journal of Trainology*. 6(2), 52-56
- Teixeira, C. V. L. S., Y. Motoyama, P. H. S. M. de Azevedo, D. S. Bocalini, and <u>J. Steele</u>, 2017. Effect of resistance training set volume on upper-body muscle hypertrophy: are more sets really better than less? *Clinical Physiology and Functional Imaging*. 38(5), 727-732
- Fisher, J.P., <u>J. Steele</u>, P. Gentil, J. Giessing, and W. Westcott, 2017. A minimal dose approach to resistance training for the older adult; the prophylactic for aging. *Experimental Gerontology*. 99, 80-86
- *Niblock, J., <u>J. Steele</u>, 2017. The 'Slingshot' can enhance volume-loads during performance of bench press using unaided maximum loads. *Journal of Trainology*. 6(2), 47-51
- Gentil, P., Del Vecchio, F. B., and <u>J. Steele</u>, 2017. Exercise for health and disease: Time to move ahead (Editorial). *BioMed Research International*. 2017,1460262,2
- Gentil, P., <u>J. Steele</u>, and J. Fisher, 2017. Why intensity is not a bad word benefits and practical aspects of high effort resistance training to the older adult. *Clinical Nutrition*. 36(5), 1454-1455
- Gentil, P., C. A. B. de Lira, S. G. C. Filho, C. V. L. Teixeira, <u>J. Steele</u>, J. Fisher, J. A. Caneiro, and M. H. Campos, 2017. High intensity interval training does not impair strength gains in response to resistance training in premenopausal women. *European Journal of Applied Physiology*. 117(6), 1257-1265
- <u>Steele, J.</u>, J Fisher, M. Skivington, C. Dunn, J. Arnold, G. Tew, A. M. Batterham, D. Nunan, J. M O'Driscoll, S. Mann, C Beedie, S. Jobson, D. Smith, A. Vigotsky, S. Phillips, P. Estabrooks, and R. Winett, 2017. A higher effort-based paradigm in physical activity and exercise for public health: making the case for a greater emphasis on resistance training. *BMC Public Health*. 17, 300
- Fisher, J., *M. Ironside, and <u>J. Steele</u>, 2017. Heavier- and lighter-load resistance training to momentary failure produce similar increases in strength with differing degrees of discomfort. *Muscle and Nerve.* 56(4), 797-803
- Fisher, J., *J. Farrow, and <u>J. Steele</u>, 2017. Acute fatigue, and perceptual responses to resistance exercise. *Muscle and Nerve.* 56(6), E141-E146
- <u>Steele, J.,</u> K Raubold, W. Kemmler, J. Fisher, P. Gentil, and J. Giessing, 2017. The effects of 6 months of progressive high effort resistance training methods upon strength, body composition, function, and wellbeing of elderly adults. *BioMed Research International*. 2017, 2541090, 14
- ‡Perrin, C., K. Nosaka, and <u>J. Steele</u>, 2017. Could titin have a role in strain-induced injuries? *Journal of Sport and Health Sciences*. 6(2), 143-144
- <u>Steele, J., J.</u> Fisher, J. Giessing, and P. Gentil, 2017. Clarity in reporting terminology and definitions of set end points in resistance training. *Muscle and Nerve*. 56(4), 368-374
- Gentil, P., A. Arruda, D. Souza, J. Giessing, A. Paoli, J. Fisher, and <u>J. Steele</u>, 2017. Is there any practical application of meta-analytical results in strength training? *Frontiers in Physiology*. 8, 1
- <u>Steele, J.,</u> J. Fisher, S. McKinnon, and P. McKinnon, 2017. Differentiation between perceived effort and discomfort during resistance training in older adults: Reliability of trainee ratings of effort and discomfort, and reliability and validity of trainer ratings of trainee effort. *Journal of Trainology*. 6(1), 1-8
- Fisher, J., †T. Clark, K. Newmann-Judd, J. Arnold, and <u>J. Steele</u>, 2017. Intra-subject variability of 5K time trial performance completed by competitive trained runners. *Journal of Human Kinetics*. 57, 139-146
- <u>Steele, J., J.</u> Fisher, A.R. Assunção, M. Bottaro, and P. Gentil, 2017. The role of volume-load in strength and absolute endurance adaptations in adolescents performing high- or low-load resistance training. *Applied Physiology, Nutrition and Metabolism.* 42(2), 193-201
- Gentil, P., J. Fisher, and <u>J. Steele</u>, 2017. A review of the acute effects and chronic adaptations of single- and multi-joint exercises during resistance training. *Sports Medicine*. 47(5), 843-855

- Arruda, A., D. Souza, <u>J. Steele</u>, J. Fisher, J. Giessing, and P. Gentil, 2017. Reliability of meta-analyses to evaluate resistance training programmes. *Journal of Sport Sciences*. 35(20), 1982-1984
- Gentil, P., J. Fisher, <u>J. Steele</u>, and A. Arruda, 2017. Manuscript clarification: Dose-response of 1, 3, and 5 sets of resistance exercise on strength, local muscular endurance, and hypertrophy. *Journal of Strength and Conditioning Research*. 31(1), e5-e7
- Vigotsky, A., C. Beardsley, B. Contreras, <u>J. Steele</u>, D. Ogborn, and S. Phillips, 2017. Greater electromyographic responses do not imply greater motor unit recruitment and 'hypertrophic potential' cannot be inferred. *Journal of Strength and Conditioning Research*. 31(1), e1-e4
- Steele, J., 2017. An ancient perspective on deconditioning in low back pain. Journal of Evolution and Health. 2(2), 1-37
- Fisher, J., A. Sales, L Carlson, and <u>J. Steele</u>, 2017. A comparison of the motivational factors between CrossFit participants and other resistance exercise modalities; A Pilot Study. *Journal of Sports Medicine and Physical Fitness*. 57(9), 1227-1234
- Fisher, J., <u>J. Steele</u>, and D. Smith, 2017. High- and Low-load resistance training; Interpretation and Practical Application of Current Research findings. *Sports Medicine*. 47, 393-400
- Anderson, N., L. A. O'Neill, <u>J. Steele</u>, and L. Harden, 2017. Pokémon Go Mobile App User Guide. *British Journal of Sports Medicine*. 51(20), 1505-1506
- Gentil, P., J. Fisher, and <u>J. Steele</u>, 2016. Authors' Reply to Ribeiro et al.: "A Review of the Acute Effects and Long-Term Adaptations of Single- and Multi-Joint Exercises During Resistance Training". *Sports Medicine*. 47(4),795-798
- Fisher, J., <u>J. Steele</u>, and D. Jessop, 2016. Surface electromyography and force production of a novel strength training method suitable for microgravity. *Journal of Trainology*. 5(2), 46-52
- *Conway, R., *J. Behennah, J. Fisher, N. Osborne, and <u>J. Steele</u>, 2016. Associations between trunk extension endurance and isolated lumbar extension strength in both asymptomatic participants and those with chronic low back pain. *Healthcare*. 4(3), 70
- Fisher, J., L. Carlson, and J. <u>Steele</u>, 2016. The effects of muscle action, repetition duration and loading strategies of a whole body progressive resistance training programme on muscular performance and body composition in trained males and females. *Applied Physiology, Nutrition and Metabolism.* 41(10), 1064-1070
- *Edinborough, L., J. Fisher, and <u>J. Steele</u>, 2016. A comparison of the effect of kettlebell swings and isolated lumbar extension training upon acute torque production of the lumbar extensors. *Journal of Strength and Conditioning Research*. 30(5), 1189-1195
- Fisher, J. P., L. Carlson, and <u>J. Steele</u>, 2016. The effects of breakdown set resistance training on strength and body composition in young males and females. *Journal of Strength and Conditioning Research*. 30(5), 1425-1432
- Fisher, J., M. Asanovich, R. Cornwell, and <u>J. Steele</u>, 2016. A neck strengthening protocol in adolescent males and females for athletic injury prevention. *Journal of Trainology*.5(1), 13-17
- Giessing, J., B. Eichmann, <u>J. Steele</u>, and J. Fisher, 2016. A comparison of low volume 'high-intensity-training' and high volume traditional resistance training methods on muscular performance, body composition, and subjective assessments of training. *Biology of Sport*. 33(3), 241-249
- Giessing, J., J. Fisher, <u>J. Steele</u>, F. Rothe, K. Raubold, and B. Eichmann, 2016. The effects of low volume resistance training with and without advanced techniques in trained participants. *Journal of Sports Medicine and Physical Fitness*. 56(3), pp 249-258
- <u>Steele, J.,</u> S. Bruce-Low, D. Smith, D. Jessop, and N. Osborne, 2016. A randomized controlled trial of the effects of isolated lumbar extension exercise on lumbar kinematic pattern variability during gait in chronic low back pain. *PM&R*. 8(2), pp 105-114
- Fisher, J., *D. Blossom, and <u>J. Steele</u>, 2016. A comparison of volume-equated knee extension to failure, or not to failure, upon rating of perceived exertion and strength adaptations. *Applied Physiology, Nutrition and Metabolism.* 41(2), pp 168-174
- Gentil, P., J. Steele, M. C. Pereira, R. P. M. Castanheira, A. Paoli, and M. Bottaro, 2016. Comparison of upper body strength gains between men and women after 10 weeks of resistance training. *Peer J.* 4, pp e1627
- Steele, J., S. Bruce-Low, D. Smith, D. Jessop, and N. Osborne, 2016. Determining the reliability of a custom built seated stadiometry set-up for measuring spinal height in participants with chronic low back pain. Applied Ergonomics. 53, pp 203-208
- Steele, J., S. Bruce-Low, D. Smith, N. Osborne, and A. Thorkeldsen, 2015. Can specific loading through exercise impart healing or regeneration of the intervertebral disc? *The Spine Journal*. 15(10), pp 2117-2221
- Fisher, J. P., L. Carlson, <u>J. Steele</u>, D. Smith, 2015. Reply to "Discussion of 'The effects of pre-exhaustion, exercise order, and rest intervals in a full body resistance training intervention' Pre-exhaustion exercise and neuromuscular adaptations: an inefficient method? *Applied Physiology, Nutrition and Metabolism.* 40(8), pp 852-853
- de Franca, H. S., P. A. N. Branco, D. P. Guedes Junior, P. Gentil, <u>J. Steele</u>, C. V. L. Teixeira, 2015. The effects of adding single-joint exercises to a multi-joint exercise resistance training program on upper body muscle strength and size in trained men. *Applied Physiology*, *Nutrition and Metabolism*. 40(8), pp 822-826
- Steele, J., *A. Fitzpatrick, S. Bruce-Low, and J. Fisher, 2015. The effects of set volume during isolated lumbar extension resistance training in recreationally trained males. *Peer J.* 3, pp e878
- <u>Steele, J.</u>, S. Bruce-Low, and D. Smith, 2015. A review of the clinical value of isolated lumbar extension resistance training for chronic low back pain. *PM&R*. 7(2), pp 169-187

- <u>Steele, J.,</u> S. Bruce-Low, and D. Smith, 2015. A review of the specificity of exercises designed for conditioning the lumbar extensors. *British Journal of Sports Medicine*. 49(5), pp 291-297
- **Steele, J.,** 2014. Regarding the article "Effect of lumbar stabilization and dynamic lumbar strengthening exercises in patients with chronic low back pain". *Annals of Rehabilitation Medicine*. 38(6), pp 876-878
- Fisher, J., and <u>J. Steele</u>, 2014. Questioning the resistance/aerobic training dichotomy: A commentary on physiological adaptations determined by effort rather than exercise modality. *Journal of Human Kinetics*. 44, pp 137-142
- Steele, J., S. Bruce-Low, D. Smith, D. Jessop, and N. Osborne, 2014. Lumbar kinematic variability during gait in chronic low back pain and associations with pain, disability and isolated lumbar extension strength. *Clinical Biomechanics*. 29(10), pp 1131-1138
- Fisher, J., <u>J. Steele</u>, P. McKinnon, and S. McKinnon, 2014. Strength gains as a result of brief, infrequent resistance exercise in older adults. *Journal of Sports Medicine*. Pp 1-7
- Fisher, J., L. Carlson, <u>J. Steele</u>, and D. Smith, 2014. The effects of pre-exhaustion, exercise order and rest-intervals in a full body resistance training intervention in trained participants. *Applied Physiology, Nutrition and Metabolism*. 39(11), pp 1265-1270
- Fisher, J., <u>J. Steele</u>, M. Brzycki, and B. DeSimone, 2014. Primum non nocere: A commentary on avoidable injuries and safe resistance training techniques. *Journal of Trainology*. 3(1), pp 31-34
- Steele, J., and J. Fisher, 2014. Scientific rigour: a heavy or light load to carry? Sports Medicine. 44(1), pp 141 142
- **Steele, J.**, 2014. Intensity; in-ten-si-ty; noun. 1. Often used ambiguously within resistance training. 2. Is it time to drop the term altogether? *British Journal of Sports Medicine*. 48(22), 1586-1588
- <u>Steele, J., S.</u> Bruce-Low, and D. Smith, 2014. A Reappraisal of the Deconditioning Hypothesis in Low Back Pain: Evidence from a Triumvirate of Research Methods on Specific Lumbar Extensor Deconditioning. Current Medical Research and Opinion. 30(5), pp 865-911
- Fisher, J., <u>J. Steele</u>, and D. Smith, 2013. Evidence Based Resistance Training Recommendations for Muscular Hypertrophy. *Medicina Sportiva*. 17(4), pp 217 235
- <u>Steele, J.</u>, S. Bruce-Low, and D. Smith, 2013. Re: Willemink MJ, van Es HW, Helmhout PH, et al. The effects of dynamic isolated lumbar extensor training on lumbar multifidus functional cross-sectional area and functional status of patients with chronic non specific low back pain. Spine 2012;37: E1651–8. *Spine*. 38(18), pp 1609 1610
- Steele, J., S. Bruce-Low, D. Smith, D. Jessop, and N. Osborne, 2013. A Randomised Controlled Trial of Limited Range of Motion Lumbar Extension Exercise in Chronic Low Back Pain. *Spine*. 38(15), pp 1245-1252
- <u>Steele, J.</u>, J. Fisher, D. McGuff, S. Bruce-Low, and D. Smith, 2012. Resistance training to momentary muscular failure improves cardiovascular fitness in humans: A review of acute physiological responses and chronic physiological adaptations. *Journal of Exercise Physiology*. 15(3), pp 53 80
- **Steele, J.**, and S. Bruce-Low, 2012. Steiger et al. 2011: relationships and specificity in CLBP rehabilitation through exercise. *European Spine Journal*. 21(9), pp 1887
- Fisher, J., and <u>J. Steele</u>, 2012. Is truth in authority or authority in truth? Limitations to the publication of scientific research. *Journal of Exercise Physiology*. 15(1), pp 57 64
- Fisher, J., <u>J. Steele</u>, S. Bruce-Low, and D. Smith, 2011. Evidence Based Resistance Training Recommendations. *Medicina Sportiva*. 15(3), 147 162

Notes on Retractions and Retraction Requests:

Some articles on which I am a co-author do not appear in the list above. This is because they have been retracted, or retraction requested, by myself as an author. This related to two separate contexts and these articles have been listed below for transparency with links to explanatory documents provided at the end of this list.

Articles involving Matheus Barbalho:

- The following articles have been retracted, or retraction requested, because after further investigation I no longer had faith in the veracity of the data. The articles are listed, followed by documentation detailing the concerns, and then the retraction and other notices from journals.
 - o Articles:
 - Barbalho, M., D. Sousa, V. Coswig, <u>J. Steele</u>, J. P. Fisher, O. Abrahin, A. Paoli, and P. Gentil, 2021. The effects of resistance exercise selection on muscle size and strength in trained women. *International Journal of Sports Medicine*. 42(4), 371-376 (REMOVED FROM AUTHOR LIST)
 - Barbalho, M., V. Coswig, R. Raiol, J. P. Fisher, <u>J. Steele</u>, A. Bianco, and P. Gentil, 2020. Single joint exercises do not provide benefits in performance and anthropometric changes in recreational bodybuilders. *European Journal of Sport Science*. 20(1), 72-79 (RETRACTION REQUESTED)
 - Barbalho, M., V. S. Coswig, <u>J. Steele</u>, J. P. Fisher, J. Giessing, and P. Gentil, 2019. Evidence of a ceiling effect for training volume in muscle hypertrophy and strength in trained men Less is more?.
 International Journal of Sports Physiology and Performance. 15(2), 268-277 (RETRACTED)
 - Barbalho, M., V. S. Coswig, <u>J. Steele</u>, J. P. Fisher, A. Paoli, P. Gentil, 2019. Evidence for an upper threshold for resistance training volume in trained women. *Medicine and Science in Sports and Exercise*. 51(3), 515-522 (RETRACTED)

- Barbalho, M., P. Gentil, R. Raiol, J. P. Fisher, <u>J. Steele</u>, and V. Coswig, 2020. Influence of adding single-joint exercise to a multijoint resistance training program in untrained young women. *Journal of Strength and Conditioning Research*. 34(8), 2214 2219 (RETRACTED)
- Barbalho, M., V. Coswig, R. Raiol, <u>J. Steele</u>, J. P. Fisher, A. Paoli, A. Bianco, and P. Gentil, 2018. Does the addition of single joint exercises to a resistance training program improve changes in performance and anthropometric measures in untrained men? *European Journal of Translational Myology*. 28(4), 7827 (RETRACTION REQUESTED)
- Barbalho, M., V. Coswig, R. Raiol, <u>J. Steele</u>, J. P. Fisher, A. Paoli, and P. Gentil, 2018. Effects of adding single joint exercises to a resistance training programme in trained women. *Sports*. 6(4), 160 (RETRACTION REQUESTED)
- Barbalho, M., P. Gentil, M. Izquierdo, J. P. Fisher, <u>J. Steele</u>, R. Raiol, 2017. There are no no-responders to low or high resistance training volumes among older women *Experimental Gerontology*. 99, 18-26 (RETRACTION REQUESTED)
- o Documentation detailing concerns:
 - White Paper: Improbable data patterns in the work of Barbalho et al. https://osf.io/preprints/sportrxiv/sg3wm
 - Stronger by Science: Improbable data patterns in the work of Barbalho et al.: An explainer https://www.strongerbyscience.com/barbalho/
 - Retraction Watch: Calling exercise data "atypical, improbably, and to put it bluntly, pretty weird," sleuths call for seven retractions https://retractionwatch.com/2020/07/21/calling-exercise-data-atypical-improbable-and-to-put-it-bluntly-pretty-weird-sleuths-call-for-seven-retractions/
 - Retraction Watch: Exercise researcher earns more retractions as investigations mount https://retractionwatch.com/2021/12/17/exercise-researcher-earns-more-retractions-asinvestigationsmount/?fbclid=lwAR1anyXXsTMFCSzs7gslfgCq9t4yz1Hk34oeJnwDAx5qOczcyiLeMYzUo44
- Retraction and Other Notices:
 - Retraction notice from Medicine and Science in Sport and Exercise https://journals.lww.com/acsm-msse/Citation/9000/Upper Threshold for Resistance Training Volume in.96058.aspx
 - Retraction notice from International Journal of Sports Physiology and Performance https://journals.humankinetics.com/view/journals/ijspp/15/6/article-p914.xml
 - Retraction notice from Journal of Strength and Conditioning Research https://journals.lww.com/nsca-jscr/Citation/9000/Influence_of_Adding_Single_Joint_Exercise_to_a.93839.aspx
 - Removal of Authorship from International Journal of Sports Medicine https://www.thieme-connect.de/products/ejournals/abstract/10.1055/a-1400-4290

Meta-analysis of high intensity interval training for body composition in British Journal of Sports Medicine

- This article initially received a considerable amount of press coverage worldwide due to misrepresentation of the findings
 by the journal editorial staff which I attempted to quell through my press interviews, social media, and guest blog post. It
 has subsequently been retracted by the journal because of errors by co-authors of the manuscript, and insufficient
 explanations for them. We have now rectified this and have I replicated the specific work myself with a different set of
 collaborators.
 - Original Article:
 - Viana, R., J. Naves, V. Coswig, C. de Lira, <u>J. Steele</u>, J. P. Fisher, and P. Gentil, 2019. Is interval training the magic bullet for fat loss? A systematic review and meta-analysis comparing moderate intensity continuous training with high intensity interval training (HIIT). *British Journal of Sports Medicine*. 53(10), 655-664
 - Documentation detailing concerns:
 - Weighty Matters Guest post: The problems with balancing accuracy and reach in science communication: What to do when even journals want to contribute to media hype (HIIT edition) http://www.weightymatters.ca/2019/02/guest-post-problems-with-balancing.html
 - BJSM Blog Questions regarding recent BJSM systematic review on interval training and fat loss https://blogs.bmj.com/bjsm/2019/05/31/questions-regarding-dr-ricardo-borges-viana-et-al-s-paperon-interval-training-and-fat-loss/
 - Retraction Watch 'I dropped the ball': Magic bullet falls short of target https://retractionwatch.com/2020/12/18/i-dropped-the-ball-magic-bullet-falls-short-of-target/
 - o Expression of concern and retraction notice:
 - Expression of concern from British Journal of Sports Medicine https://bjsm.bmj.com/content/early/2019/06/27/bjsports-2018-099928eoc1.1
 - Retraction notice from British Journal of Sports Medicine https://bjsm.bmj.com/content/early/2020/12/15/bjsports-2018-099928.ret
 - o Replication of Original Work

Steele, J., D. Plotkin, D. Van Every, A. Rosa, H. Zambrano, B. Mendelovits, M. Mercado, J. Grgic, and B. J. Schoenfeld, 2021. Slow and steady, or hard and fast? A meta-analysis of studies comparing body composition changes between interval training and moderate intensity continuous training. Sports. 9(11), 155

Pre-print articles not yet published through peer review

*undergraduate student co-author; †postgraduate (MSc) student co-author; ‡postgraduate (PhD) student co-author at time of publication

- 1. †Bergevin, M., <u>J. Steele</u>, M. P. de la Garanderie, C. Feral-Basin, S. M. Marcora, P. Rainville, J. G. Caron, and B. Pageaux, 2021. Pharmacological blockade of muscle afferents and perception of effort: a systematic review with meta-analysis. https://www.biorxiv.org/content/10.1101/2021.12.23.474027v1
- 2. Carlson, L., D. Gschneidner, <u>J. Steele</u>, and J. P. Fisher, 2021. Short-term supervised virtual training maintains intensity of effort and represents an efficacious alternative to traditional studio-based supervised strength training. https://www.researchgate.net/profile/James-Steele-14/research
- 3. Spotswood, F., <u>J. Steele</u>, P. Androulakis-Korakakis, and A. Lucas, 2021. The role of teleoaffective profiles in practice adaptation. https://osf.io/preprints/socarxiv/ug4kg
- 4. Fisher, J., <u>J. Steele</u>, ‡M. Wolf, ‡P. Androulakis-Korakakis, D. Smith, and J. Giessing, 2021. The role of supervision in resistance training; an exploratory systematic review and meta-analysis. https://sportrxiv.org/index.php/server/preprint/view/18/version/24
- 5. Orange, S., A. Hritz, L. Pearson, O. Jeffries, T. Jones, and <u>J. Steele</u>, 2021. Effects of velocity-based training vs. alternative resistance training on changes in strength, power, and sprint speed: A systematic review, meta-analysis, and quality of evidence appraisal. https://sportrxiv.org/index.php/server/preprint/view/14/version/19
- Fairman, C., O. L. Owens, K. L. Kendall, <u>J. Steele</u>, C. Latella, M. Jones, L. Marcotte, C. J. Peddle-McIntyre, and K. K. McDonnell, 2021. Study protocol: A hybrid delivery of home-based cluster set resistance training for individuals previously treated for lung cancer. https://www.researchsquare.com/article/rs-907846/v1
- 7. ‡Budzynski-Seymour, E., M. Jones, and <u>J. Steele</u>, 2021. A "Physically Active Experience" Setting the stage for a new approach to engage children in physical activity. https://osf.io/preprints/sportrxiv/eufrd/
- 8. **Steele, J.,** 2021. What is (perceived) effort? Objective and subjective effort during task performance. https://psyarxiv.com/kbyhm
- 9. *Murphy, J. D., E. Hodson-Tole, A. Vigotsky, J. R. Potvin, J. P. Fisher, and <u>J. Steele</u>, 2021. Motor unit recruitment patterns of the quadriceps differ between continuous high- and low-torque isometric knee extension to momentary failure. https://www.biorxiv.org/content/10.1101/2021.04.08.438966v1
- 10. ‡Budzynski-Seymour, E., ‡S. Tuvey, J. Patterson, M. Jones, and <u>J. Steele</u>, 2021. A systematic review, narrative synthesis, and conceptual framework for social marketing and behavioural economics as influencers of health behaviours in children. https://psyarxiv.com/kh37d/
- 11. <u>Steele, J., J.</u> Fisher, J. Giessing, ‡P. Androulakis-Korakakis, ‡M. Wolf, B. Kroeske, and R. Reuters, 2021. Long-term time-course of strength adaptation to minimal dose resistance training: Retrospective longitudinal growth modelling of a large cohort through training records. https://osf.io/preprints/sportrxiv/eq485
- 12. ‡Budzynski-Seymour, E., M. Jones, and <u>J. Steele</u>, 2020. "You've got a Friend in Me" A Case for using Entertainment Education and Gamification Elements in Children's Physical Activity Sessions: Creating an Immersive Environment to Increase Engagement. https://preprints.jmir.org/preprint/21497
- 13. Vigotsky, A., G. Nuckols, J. Heathers, J. Krieger, B. Schoenfeld, and <u>J. Steele</u>, 2020. Improbable data patterns in the work of Barbalho et al. https://osf.io/preprints/sportrxiv/sg3wm/
- 14. Mann, S., A. Lucas, M. Wade, J. Shakespeare, ‡E. Budzynski-Seymour, *R. Conway, <u>J. Steele</u>, 2019. A cluster randomised controlled trial to assess the impact of physical education training upon movement competency outcomes. https://osf.io/preprints/sportrxiv/nxpr2
- 15. **‡**Budzynski-Seymour, E., J. Fisher, J. Giessing, P. Gentil, <u>J. Steele</u>, 2019. Relationships and comparative reliability of ultrasound derived measures of upper and lower limb muscle thickness, and estimates of muscle area from anthropometric measures. https://osf.io/preprints/sportrxiv/ujktq/
- 16. ‡Tuvey, S., <u>J. Steele</u>, X. Mayo, G. Liguori, S. Mann, ‡N. Willinger, and A. Jimenez, 2019. Are changes in cardiorespiratory fitness resulting from physical activity interventions associated with changes in academic performance and executive function in children and adolescents? A systematic review and meta-regression. https://osf.io/preprints/sportrxiv/4j2sa/
- 17. *Budzynski-Seymour, E., <u>J. Steele,</u> L. Langdown, and D. Jessop, 2019. A biomechanical analysis into backstroke start kinematics: The influence of a backstroke start device. https://osf.io/preprints/sportrxiv/2vams/
- 18. <u>Steele, J., M. Wade, M. Polley, R. J. Copeland, S. Stokes, and S. Mann, 2019. The National Referral Database: An initial overview. https://osf.io/preprints/sportrxiv/rgywq/</u>
- 19. ‡Perrin, C., and <u>J. Steele</u>, 2018. Determining causality in epidemiology: Why observational studies can be misleading and the case for experiments. https://osf.io/preprints/sportrxiv/9q5hm/

Sector/Public Facing Reports

- 1. P. Androulakis-Korakakis, N. Michalopoulos, and <u>J. Steele</u>. Are different types of trading a potential form of gambling? Gamban Public Research Report (2021). https://gamban.com/blog/gamban-blocks-trading-platforms
- 2. Technogym Intensity Matters: The Rise of High Intensity Interval Training and The Boutique Sector (2018). https://www.technogym.com/land/en/active-uk-white-paper-boutique/

From ukactive Research Institute during tenure as Principal Investigator

- 1. Life in our Years: Unlocking physical activity participation for older adults (2021). https://www.ukactive.com/reports/life-in-our-years/
- 2. Care... About Physical Activity (CAPA) 2 (2020). http://www.capa.scot/wp-content/uploads/2020/04/Final-Evaluation-Report-March-2020-CAPA-2.pdf
- 3. Golf on Referral: Full pilot evaluation 2017-2019 (2020). https://www.ukactive.com/wp-content/uploads/2020/07/Golf-on-Referral-full-pilot-evaluation-2017-20194.pdf
- 4. British Active Students Survey: Further Education (2020) https://www.ukactive.com/wp-content/uploads/2020/06/BASS-2019-FE.pdf
- 5. British Active Students Survey: Higher Education (2020) https://www.ukactive.com/wp-content/uploads/2020/06/BASS-201920-HE.pdf
- 6. COVID-19 Impact Report: The Fitness and Leisure Sector's Path to Recovery (2020) https://www.ukactive.com/wp-content/uploads/2020/05/ukactive-COVID-19-Impact-Report.pdf
- 7. British Active Students Survey: Further Education (2019). https://www.ukactive.com/reports/british-active-students-survey-further-education
- 8. Care...About Physical Activity (CAPA) (2018). https://hub.careinspectorate.com/media/1115/capa-evaluation-report-2017-2018.pdf
- 9. British Active Students Survey (2018). https://www.precor.com/sites/default/files/BASS%20report%20FINALA.PDF
- 10. Active Bucks final evaluation report (2018). http://researchinstitute.ukactive.com/projects/more/8263/page/1/active-bucks-evaluation
- 11. Sanofi The Power of Prevention (foreword). https://www.sanofi.co.uk/-/media/Project/One-Sanofi-Web/Websites/Europe/Sanofi-UK/Home/media/featured-news/publications/Power-of-prevention-report.pdf

Other Publications

- 1. <u>Steele, J.,</u> 2019. The physical activity mismatch: Can evolutionary perspectives inform exercise recommendations? *This View of Life. Evolution Institute:* https://evolution-institute.org/the-physical-activity-mismatch-can-evolutionary-perspectives-inform-exercise-recommendations/
- 2. Anderson, N, and <u>J. Steele</u>, 2016. Train for life: exercise is medicine. *BJSM blog post*: http://blogs.bmj.com/bjsm/2016/02/23/train-for-life-exercise-is-medicine/
- 3. <u>Steele, J., 2013</u>. Peer Review: what early-career researchers should know. *Elsevier Connect* : https://www.elsevier.com/connect/peer-review-what-early-career-researchers-should-know (Unedited version available here: http://ssudl.solent.ac.uk/3154/1/Peer%20Review-%20what%20early-career%20researchers%20should%20know%20(unedited%20version).pdf)

Conference Presentations & Workshops Delivered

Keynotes/Invited Presentations

- Lakens, D., P. Swinton, and <u>J. Steele</u> (chair), 2021. STORK Debate: Pros and cons of p values. Invited debate for Society for Transparency, Openness and Replication in Kinesiology (STORK) Fall Series. https://www.youtube.com/watch?v=Lw2X4cXmtkQ&t=3613s
- 2. <u>Steele, J.,</u> 2020. Reflecting on Retractions: Q&A. Invited Q&A talk for Society for Transparency, Openness and Replication in Kinesiology (STORK) Winter Series. https://youtu.be/o4e7ZXLxWRs
- 3. <u>Steele, J.,</u> 2020. Comparisons of Resistance Training and 'Cardio' Exercise Modalities: Does modality matter when effort and duration are similar? Invited lecture at *Congresso Internacional de Treinamento de Força, Esporta e Medicina Virtual Symposium*, Brazil
- 4. <u>Steele, J.,</u> 2020. Comparisons of Resistance Training and 'Cardio' Exercise Modalities: Does modality matter when effort and duration are similar? Invited lecture at *Exercise Summit 2020 Virtual Symposium*, Lisbon, Portugal
- 5. <u>Steele, J.,</u> 2019. The National Referral Database: An initial overview, existing work, and future plans. Invited lecture at *Cardiovascular Health Event: A focus on physical activity*, Edinburgh Napier University, UK
- 6. <u>Steele, J.,</u> 2019. The National Referral Database: An initial overview, existing work, and future plans. Invited lecture at British Association of Sport and Exercise Sciences Physical Activity for Health Division Day, University Centre Shrewsbury, UK
- 7. <u>Steele, J.,</u> and B. Pageaux, 2019. Understanding the role of effort, and the perception of effort, in physical activity and exercise. Tutorial lecture at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Exercise, Circadian Rhythms, and Sleep, Orlando, FL, USA*
- 8. <u>Steele, J.,</u> 2019. Training for strength vs training for sports performance. Invited lecture at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Exercise, Circadian Rhythms, and Sleep,* Orlando, FL, USA
- 9. <u>Steele, J.,</u> 2018. How much effort does it take for hypertrophy? Understanding the psychobiology of effort and its manipulation in resistance training. Invited lecture at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Muscle Hypertrophy and Atrophy, Minneapolis, MN, USA*
- 10. <u>Steele, J.,</u> 2018. Understanding the role of effort in resistance training: Is it really worth the effort? Invited lecture at *Exercise Summit 2018*, Lisbon, Portugal

- 11. <u>Steele, J.,</u> 2017. The role of effort in resistance training. Invited lecture at *International Symposium Scientific Advances in Strength Training*, Sao Paulo, Brazil.
- 12. <u>Steele, J.</u>, 2017. Understanding the evidence base: Resistance training for health. Invited talk at *Elevate 2017*, Excel, London, UK
- 13. <u>Steele, J.</u>, 2016. The emerging higher effort paradigm in physical activity and exercise for public health: A case for a greater emphasis on resistance training. Invited lecture at *International Symposium Training and Nutrition*, Belem & Vitoria, Brazil.
- 14. <u>Steele, J.,</u> 2016. The health benefits of resistance training the bigger picture. Opening Keynote lecture at the *Resistance Exercise Conference*, Minneapolis, MN, USA
- 15. **Steele, J.,** 2015. Questioning the aerobic/resistance training dichotomy does exercise mode impact adaptations? Invited lecture at *International Symposium Scientific Advances in Strength Training*, Sao Paulo, Brazil.
- 16. <u>Steele, J.,</u> 2015. Questioning the aerobic/resistance training dichotomy does exercise mode impact adaptations? Invited lecture at *Kieser Training Medical Congress*, Deutsches Hygiene-Museum, Dresden. Available at: https://www.youtube.com/watch?v=Q0V1sWVtUnE
- 17. <u>Steele, J.,</u> 2015. Positive health outcomes from resistance training. Invited lecture at *Royal Society of Medicine Exercise Medicine Conference*, Royal Society of Medicine, London.

Other Presentations

- Bergevin, M, Payen de la Garanderie, M., Féral-Basin, C., Caron, J., <u>Steele, J.</u> & Pageaux, B. (2021, mars). *Est-ce que les afférances musculaires III-IV sont nécessaires pour percevoir l'effort? Une revue systématique avec méta-analyse*. 26^{ème} congrès de l'AQSAP, Association Québécoise des Sciences de l'Activité Physique
- 2. Bergevin, M, Payen de la Garanderie, M., Féral-Basin, C., Caron, J., <u>Steele, J.</u> & Pageaux, B. (2021, mars). *Est-ce que les afférances musculaires III-IV sont nécessaires pour percevoir l'effort? Une revue systématique avec méta-analyse*. Journée de la recherche, École de kinésiologie et des sciences de l'activité physique, Université de Montréal
- 3. Willinger, N., <u>J. Steele</u>, G. Liguori, L. Atkinson, S. Mann, A. Jimenez, and E. Horton, 2020. Comparing and explaining membership length and attendance behaviour of women in female-only and mixed-gender gyms. 2199 Board #118 May 28. Presented at *American College of Sports Medicine Annual Meeting*, Virtual Experience
- 4. Vale, A.F., J. A. Carniero, P. C. Jardim, T.S.V. Jardim, <u>J. Steele</u>, J. Fisher, and P. Gentil, 2020. Effects of high intensity resistance training protocols on cardiovascular parameters in hypertensive women. 521 Board #337 May 27. Presented at *American College of Sports Medicine Annual Meeting*, Virtual Experience
- 5. Rowley, N., <u>J. Steele</u>, S. Mann, G. Liguori, A. Jimenez, and E. Horton, 2020. Observing key characteristics of exercise referral schemes in the United Kingdom. 1213 Board #339 May 27. Presented at *American College of Sports Medicine Annual Meeting*, Virtual Experience
- 6. Budzynski-Seymour, E., R. Conway, M. Wade, A. Lucas, M. Jones, S. Mann, and <u>J. Steele</u>, 2019. Physical activity, mental and personal wellbeing, social isolation, and perceptions of academic attainment and employability in university students: Pooled analysis of the Scottish and British Active Student Surveys. Poster presented at *SMaRteN Conference, University of Cambridge, UK*
- 7. **Steele, J.,** W.D.D.S.C. Viera, M. Bottaro, V. Nunes, R. Ramirez-Campillo, J. Fisher, and P. Gentil, 2019. Incongruence of objective measures of actual effort, and subjective perception of effort, during maximal intended velocity resistance training. Poster presented at *British Association of Sport and Exercise Science Conference*, King Power Stadium, UK.
- 8. Androulakis-Korakakis, P., J.P. Fisher, and <u>J. Steele</u>, 2019. The minimum effective training dose required to increase 1RM strength in resistance trained-men: a systematic review. Presented at *British Association of Sport and Exercise Science Conference*, King Power Stadium, UK.
- 9. Budzynski-Seymour, E., <u>J. Steele</u>, and M. Jones, 2019. Eliciting behaviour change in children, the influence of social marketing strategies on children's lifestyle choices: A systematic review and qualitative synthesis. Poster presented at *British Association of Sport and Exercise Science Conference*, King Power Stadium, UK.
- Tuvey, S, <u>J. Steele</u>, E. Horton, S. Mann, and A. Jimenez, 2019. Three-year surveillance of cardiorespiratory fitness in UK primary school children. Presented at 24th Annual Congress of the European College of Sport Science, Prague, Czech Republic
- 11. Willinger, N, <u>J. Steele</u>, L. Atkinson, S. Mann, A. Jimenez, and E. Horton, 2019. Predicting retention and attendance behaviour of leisure centres members. Poster presented at 24th Annual Congress of the European College of Sport Science, Prague, Czech Republic
- 12. Rowley, N., <u>J. Steele</u>, S. Mann, G. Liguori, A. Jimenez, and E. Horton, 2019 Examining the effects of exercise referral schemes on changes in physical activity levels: 477 Board #315 May29. Presented at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Circadian Rhythms and Sleep, Orlando, FL, USA*
- 13. Vale, A.F., J.C. Alves, P.C.V. Jardim, T. V. Jardim, <u>J. Steele</u>, J.P. Fisher, and P. Gentil, 2019. Effects of high intensity resistance training on cardiac autonomic modulation in hypertensive women: 1866 Board #22 May 30. Presented at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Circadian Rhythms and Sleep, Orlando, FL, USA*
- 14. Wade, M., N. Brown, J. Steele, B. Dancy, and A. Majumdar, 2019. Comparing health improvements achieved through different pathways of a community-based motivational interviewing physical activity programme: 2764 May 31. Presented at American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Circadian Rhythms and Sleep, Orlando, FL, USA

- 15. Willinger, N.A., <u>J Steele</u>, G Liguori, S. Mann, L. Atkinson, A. Jimenez, and E. Horton, 2019. Recommendations for the implementation of physical activity interventions evaluations in leisure centres: 3012 Board #58 May 31. Presented at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Circadian Rhythms and Sleep*, Orlando, FL, USA
- 16. Lucas, A., M. Wade, S. Mann, and <u>J. Steele</u>, 2018. Shaping an environment, shapes our minds: The Care About Physical Activity (CAPA) programme, a qualitative piece on promoting movement change in care services for older people. Oral Poster presented at 7th International Society for Physical Activity and Health Congress, London, UK
- 17. Williams, T., M. Wade, N. Price, <u>J. Steele</u>, R. Copeland, and S. Mann, 2018. Exploring the impact of exercise referral schemes through the development and interrogation of UK multi-scheme database. Oral Poster presented at 7th International Society for Physical Activity and Health Congress, London, UK
- 18. <u>Steele, J., M.</u> Wade, and S. Mann, 2018. Phase angle as an indicator of health and fitness in participants entering an exercise referral scheme. Oral Poster presented at 7th International Society for Physical Activity and Health Congress, London, UK
- 19. <u>Steele, J., R. Conway, S. Weber, J. Niblock, J. Fisher, P. Gentil, C. Scott, and H. Ozaki, 2018. Energy expenditure, physiological, and perceptual responses to a brief, simple bodyweight resistance training protocol in previously sedentary adults: A pilot study. e-Poster presented at 7th International Society for Physical Activity and Health Congress, London, UK</u>
- 20. Gentil, P., J. Fisher, <u>J. Steele</u>, M. Campos, M. Silva, A. Paoli, J. Giessing, and M. Bottaro, 2018. Effects of equal-volume resistance training with different training frequencies in muscle size and strength of trained men. Presented at 23rd Annual Congress of the European College of Sport Science, Dublin, UK
- 21. Fisher, J., <u>J. Steele</u>, and C. Stuart, 2018. Male and female fatigue responses to heavier- and lighter-load lumbar extension resistance training: 1776 Board #37 May 31 2. Presented at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Muscle Hypertrophy and Atrophy, Minneapolis, MN, USA*
- 22. Gentil, P., M. Bottaro, V. A. Marques, J. P. P. Neto, A. C. G. Santos, <u>J. Steele</u>, J. Fisher, A. Paoli, and P. Prudente, 2018. Using velocity loss for monitoring resistance training effort in a real-world setting: 1790 Board #51 May 21 2. Presented at *American College of Sports Medicine Annual Meeting and World Congress on the Basic Science of Muscle Hypertrophy and Atrophy*, Minneapolis, MN, USA
- 23. <u>Steele, J., J. Fisher</u>, S. Bruce-Low, D. Smith, N. Osborne, and D. Newell, 2017. Variability in strength, pain, and disability changes in response to an isolated lumbar extension resistance training intervention in participants with chronic low back pain. Presented at *Society for Back Pain Research 2017*, Northampton, UK
- 24. Perrin, C., S. Bruce-Low, J. Arnold, S. Burnet, S. Holloway, <u>J. Steele</u>, 2017. Lumbar strength and activation patterns in football players with and without a history of hamstring injuries. Presented at *Society for Back Pain Research 2017*, Northampton, UK
- 25. Bragança, S., <u>J. Steele</u>, S. Gill, M. Carvalho, and P. Arezes, 2017. Sports-wear in wheelchair rugby: establishing the need for wheelchair specific sportswear. Presented at *8th International Conference on Applied Human Factors*, Westin Bonaventure Hotel, Los Angeles, California, USA
- 26. <u>Steele, J., J. Fisher, A.R. Assunção, M. Bottaro, and P. Gentil, 2016. The role of volume-load in strength and absolute endurance adaptations in adolescents performing high- or low-load resistance training. Presented at *10th International Conference on Strength Training*, Kyoto, Japan</u>
- 27. Fisher, J., <u>J. Steele</u>, and J. Farrow, 2016. The acute fatigue responses to heavier- and lighter-load and advanced technique resistance training. Poster presented at *10th International Conference on Strength Training*, Kyoto, Japan
- 28. <u>Steele, J., S. Bruce-Low, and D. Smith, 2016. Does change in isolated lumbar extension function correlate with positive clinical outcome? Presented at *9th Interdisciplinary World Congress on Low Back and Pelvic Pain, Marina Bay Sands, Singapore*</u>
- 29. <u>Steele, J.,</u> J. Fisher, S. McKinnon, and P. McKinnon, 2016. Differentiation between perceived effort and discomfort during resistance training: Reliability of trainee ratings of effort and discomfort, and reliability and validity of trainer ratings of trainee. Presented at 21st Annual Congress of the European College of Sport Science, Vienna, Austria
- 30. Gentil, P., M. Pereira, R.P.M. Castanheira, <u>J. Steele</u>, A. Paoli, and M. Bottaro, 2016. Comparison of upper body strength gains between men and women after 10 weeks of resistance training. Poster presented at 21st Annual Congress of the European College of Sport Science, Vienna, Austria
- 31. Fisher, J., L. Carlson, and <u>J. Steele</u>, 2016. The effects of muscle action, repetition duration and loading strategies of a whole body progressive resistance training programme on muscular performance and body composition in trained persons. Presented at 21st Annual Congress of the European College of Sport Science, Vienna, Austria
- 32. <u>Steele, J.,</u> J. Giessing, B. Eichmann, and J. Fisher, 2015. A comparison of two ecologically valid resistance training methods upon strength, body composition, and subjective assessments of training. Poster presented at *British Association of Sport and Exercise Science Conference*, St. George's Park, UK.
- 33. Hill, A., and <u>J. Steele</u>, 2015. A pilot study for inter-user variability of dietary analysis with MyFitnessPal by exercise professionals. Poster presented at *British Association of Sport and Exercise Science Conference*, St. George's Park, UK.
- 34. Fisher, J., <u>J. Steele</u>, and D. Jessop, 2015. Muscle Activation and Force production for a novel resistance training approach in trained males, suitable for Space Flight and Micro-Gravity environments. Poster presented at *British Association of Sport and Exercise Science Conference*, St. George's Park, UK.
- 35. Giessing, J., C. Teigland, <u>J. Steele</u>, J. Fisher, and B. Eichmann, 2015. Reduction of visceral fat with high intensity training. *4th Congress of the European College of Sport and Exercise Physicians*, Barcelona, Spain

- 36. Teigland, C., B. Eichmann, J. Fisher, J. Steele, J. Giessing, 2015. Muscle hypertrophy and strength increases for men and women after 10 weeks of high intensity training. Presented at 4th Congress of the European College of Sport and Exercise Physicians, Barcelona, Spain
- 37. <u>Steele, J.,</u> 2014. A synthesis of modern exercise physiology and evolutionary theory. Presented at the *Ancestral Health Symposium*, University of California, Berkeley. Available at: https://www.youtube.com/watch?v=8YFdL7D65Ng
- 38. <u>Steele, J.</u> S. Bruce-Low, D. Smith, D. Jessop, and N. Osborne, 2013. Isolated lumbar extension resistance reduces lumbar kinematic variability during gait in chronic low back pain participants. Presented at *8th Interdisciplinary World Congress on Low Back and Pelvic Pain*, Dubai Intercontinental and Crowne Plaza Hotels
- 39. <u>Steele, J.</u>, 2013. An Ancient Perspective on Deconditioning in Low Back Pain. Presented at *Ancestral Health Symposium*, Atlanta Sheraton Hotel
- 40. **Steele, J.**, S. Bruce-Low, D. Smith, and D. Jessop, 2012. Limited Range of Motion Lumbar Extension Resistance Exercise in Chronic Low Back Pain Participants. Presented at *Physiology*, Edinburgh International Conference Centre
- 41. <u>Steele, J.,</u> and S. Bruce-Low, 2010. Effect of training with and without pelvic restraints, on development of lumbar extension strength and lumbar muscle activity. Presented at *British Association of Sport and Exercise Science Student Conference*, University of Aberystwyth
- 42. <u>Steele, J.,</u> and S. Bruce-Low, 2009. Effect of training with and without pelvic restraints, on development of lumbar extension strength and lumbar muscle activity A Research Proposal. Presented at *British Association of Sport and Exercise Science Student Conference*, University of Hull

<u>Grants/Funding/Tenders/Consultancy Research – Applied for, and Awarded (PI = Principal Investigator; CoI = Co-Investigator)</u> 2021

- NIHR Crossprogramme Programme, 20/142 Prehabilitation: Living with and beyond cancer (£1,893,486.00, unsuccessful, Col)
 - STrengthening Exercise Prehabilitation during Treatment of OEsophageal cancer (STEPTOE study) a multicentre randomised trial investigating the impact of resistance training prehabilitation on physical performance and outcomes during treatment for oesophageal cancer.
- NIHR Crossprogramme Programme, 20/142 Prehabilitation: Living with and beyond cancer (£707,819.00, unsuccessful,
 Col)
 - "Levelling-up prehabilitation" A mixed methods evaluation of five cancer prehabilitation services in the North of England.

2020

- John Templeton Foundation Science of Purpose Outline Application (£672,194.00 unsuccessful, PI)
 - Understanding Effort
- Miha Bodytech Consultancy Research (£8,000.00 <u>AWARDED</u>, PI)
 - o Narrative review of electromyostimulation (EMS).
- Sense Tender (£36,477.00 <u>AWARDED</u>, PI)
 - o Understanding the complex needs of families with disabled children.
- The British Academy Special Research Grants: COVID-19 (£9,958.50 unsuccessful, PI)
 - The impact of government measures to limit the spread of Coronavirus (COVID-19) on resistance training practices and experiences of individuals previously engaged in these behaviours.
- UKRI-MRC COVID-19 Rapid Response Rolling Call (£69,601.00 unsuccessful, PI)
 - Active Lockdown: The Role of Physical Activity in Wellbeing During and Beyond COVID-19, and The Impact of Sector Strategies to Keep the UK Active
- Royal Osteoporosis Society Consultancy Research (£2,500.00 <u>AWARDED</u>, PI)
 - o Leisure operators understanding of, and provision for, bone health and those with osteopenia/osteoporosis
- Chartered Society of Physiotherapists Tender (£98,000.00 unsuccessful, PI)
 - Strength Messaging Insight Project
- World Cancer Research Fund (£319,268.00 unsuccessful)
 - The effectiveness of prehabilitation and rehabilitation services in cancer patients undergoing elective curative surgery: Pragmatic evaluation of the Prehab4Cancer and Recovery programme
- England Golf Consultancy Research (£11,630.00 <u>AWARDED</u>, PI)
 - o Golf participation, health and wellbeing
- Research England: Policy through evidence funding call (£1950,00 AWARDED, PI)
 - Supporting the Chief Medical Officers Expert Working Group for Communications of the Physical Activity Guidelines: A rapid review of communication strategies for physical activity guidelines and physical activity promotion

2019

- British Universities and Colleges Sport, AoC Sport and Matrix Fitness Consultancy Research (£20,000.00 <u>AWARDED</u>,
 PI)
 - British Active Students Survey (2019-2020)

- England Golf and Mytime Active Consultancy Research (£10,000.00 <u>AWARDED</u>, PI)
 - o Golf on Referral pilot 2 evaluation
- Mytime Active Tender (£73,091.00 unsuccessful, PI)
 - Assessing and Evaluating Impact
- Sport England Project grant (£672,000.00 <u>AWARDED</u>, PI)
 - The impact of a toolkit for healthcare professionals to support physically active pregnancies upon physical activity levels in pregnant women and new mothers: This Mum Moves
- Premier Education Consultancy Research (£26,500.00 <u>AWARDED</u>, PI)
 - Premier Kids do Better Evaluation of Premier Educations Primary School Delivery upon Children's Fitness and Wellbeing
- Sainsbury's Consultancy Research (£32,765.00 AWARDED, PI)
 - Active Kids Summer Camps Evaluation Year 2
- Serco Consultancy Research (£6,732.00 <u>AWARDED</u>, PI)
 - o Fitness instructor engagement to understand requirements of training disabled individuals.
- Innovate UK, Industrial Strategy Challenge Fund, Health Ageing Trailblazers (£97,950.00 stage 1 application, unsuccessful, PI)
 - Towards an active ageing society
- Wellcome Trust Biomedical Resource and Technology Grant (£893,410.80 unsuccessful, PI)
 - The National Referral Database

2018

- AoC Sport and Matrix Fitness Consultancy Research (£15,000.00 AWARDED, PI)
 - o British Active Students Survey (2018-2019)
- Sainsbury's Consultancy Research (£12,000.00 AWARDED, PI)
 - Active Kids Summer Camps Evaluation Year 1
- Sport England Project grant (£130,000.00 <u>AWARDED</u>, PI)
 - o Type 2 Diabetes Care Pathway Development
- Scottish Care Inspectorate Tender (£61,800.00 AWARDED, PI)
 - Provision of a measurement framework and the evaluation of impact for Care About Physical Activity 2 (CAPA2; and improvement programme promoting physical activity with older people)
- Sport England Tender (£21,987.90 unsuccessful, PI)
 - o Attitudes and Behaviours Multivariate Analysis
- Inspired Villages Group Consultancy Research (£25,701.60 <u>AWARDED</u>, PI)
 - Development and implementation of Health MOTs to evaluate physical and mental health and wellbeing in Later Living Villages
- Richmond Group of Charities Tender (£80,000.00 unsuccessful, PI)
 - o Movement for All Programme Evaluation
- Sport England Tender (£178,950.00, unsuccessful, PI)
 - Tackling Inactivity Programme Evaluation
- Oomph! Wellness and Bournemouth University Matched PhD Studentship (£51,000.00 AWARDED, PI)
 - The physical and psychological effects of a whole systems wellness intervention for older adults living in care homes
- Dunhill Medical Trust (£147,817.00 Invited for full application, unsuccessful, PI)
 - A Pilot Study of The Effects of Isolated Lumbar Extension Resistance Training Upon the Lumbar Intervertebral Disc and Vertebral Bodies in Older Adults with Chronic Low Back Pain as Assessed by Magnetic Resonance Imaging and Quantitative Fluoroscopy
- Oxygen Freejumping (£12,000.00 <u>AWARDED</u>, PI)
 - Energy expenditure estimates and affective responses from children participating in a trampoline park session compare with traditional extra-curricular sports clubs: A replicated crossover study.

2017

- NIHR Public Health Research, Researcher Led (£961,242.00 Stage 1 application unsuccessful, PI)
 - Development and evaluation of an intervention for initiation and maintenance of self-managed, home- or community centre-based resistance exercise in community dwelling adults: The <u>Resistance Exercise And</u> <u>Community Health (REACH)</u> Project
- Sport England Active Ageing Fund (£120,634.00 unsuccessful)
 - Piloting the use of local radio to promote healthy behaviour change in the inactive 55+ population of Andover in Hampshire
- North American Spine Society Nontraditional, Nonsurgical Treatment Grant (£47,044.96 unsuccessful, PI)
 - The Effects of Isolated Lumbar Extension Resistance Training Upon the Lumbar Intervertebral Disc and Vertebral Bodies in Participants with Chronic Low Back Pain as Assessed by Magnetic Resonance Imaging and Quantitative Fluoroscopy

- Alzheimer's Society PhD Studentship (£66,380.00 unsuccessful, PI)
 - o Efficacy and effectiveness of an innovative approach to exercise in residential care homes
- Chartered Society of Physiotherapists (£24,697.50 unsuccessful)
 - Measurement of advanced motor skills using the challenge module for children with cerebral palsy participating in a group exercise program
- Southampton Solent University Research, Innovation and Knowledge Exchange (£8,475 <u>AWARDED</u>, PI)
 - <u>Resistance Exercise And Community Health (REACH)</u>: The efficacy of a simple bodyweight resistance exercise intervention in producing improvements in putative markers of health and longevity in currently sedentary adults Pilot Trial
- Southampton Solent University Research, Innovation and Knowledge Exchange (£6609.82 <u>AWARDED</u>, PI)
 - <u>Resistance</u> Exercise in <u>Primary</u> Schools (<u>REPS</u>) Efficacy and effectiveness of a simple bodyweight resistance exercise intervention in primary school children Pilot Trial
- North American Spine Society Nontraditional, Nonsurgical Treatment Grant (£34,219.39 unsuccessful, PI)
 - The Effects of Isolated Lumbar Extension Resistance Training Upon the Lumbar Intervertebral Disc in Participants with Chronic Low Back Pain as Assessed by Magnetic Resonance Imaging

<u> 2015</u>

- Innovate UK, Innovation Voucher, Wellbalancer Ltd Consultancy Research (£6,453.20 <u>AWARDED</u>, PI)
 - Investigation of the effects upon muscle performance of a device designed to mitigate the impact of non-ionising radiation.
- Southampton Solent University Research, Innovation and Knowledge Exchange (£6,000 <u>AWARDED</u>)
 - An investigation to consider the relationship between low-back pain, lumbar strength, and posture in clerical and manual University Staff with and without low back pain.

2014

- Southampton Solent University Research & Enterprise (£1,737 <u>AWARDED</u>, PI)
 - The 'Lift big-get big' culture and the mass media: an interdisciplinary approach.
- Chiropractic Research Council (£69,000 unsuccessful)
 - Development and validation of a predictive screening tool to identify which patients are more likely to respond to either functional motor control or isolated lumbar extension resistance training exercise.
- The Henry Smith Charity (£42,405 unsuccessful, PI)
 - The Effects of Isolated Lumbar Extension Resistance Training Upon the Lumbar Intervertebral Disc in Participants with Chronic Low Back Pain as Assessed by Magnetic Resonance Imaging

Other Academic Activity/Professional Membership

- Expert Advisory Positions
 - o Expert Reviewer for UK Physical Activity and Exercise Rapid Review Service
 - http://www.bristol.ac.uk/sps/research/projects/physical-activity/new-resource/
 - Member of Expert Group for the Communications of the Chief Medical Officers UK Physical Activity Guidelines
 - Member of Expert Working Group revising the Chief Medical Officers UK Physical Activity Guidelines for Adults,
 2018
 - Working Group paper available here: http://www.bristol.ac.uk/media-library/sites/sps/documents/cmo/adults-technical-report.pdf
 - UK Chief Medical Officers Physical Activity Guidelines available here: https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report
 - Member of Steering Group for NIHR Dissemination Centre Themed Review on Physical Activity
 - Available here: https://discover.dc.nihr.ac.uk/content/themedreview-03898/moving-matters-interventions-to-increase-physical-activity
 - Member of Steering Group for British Association of Sport and Exercise Sciences, Special Interest Group for Sport, Exercise, and Health Analytics
 - https://members.bases.org.uk/spage-special_interest_groupssport_exercise_and_health_analytics.html
 - Member of Expert Panel Emerging Themes for the Review of Everybody Active Every Day (EAED) Five Years
 On.
 - https://www.icf.com/-/media/files/icf/reports/2020/report-a-review-of-everybody-active-every-day-five-years-on-icf.pdf
 - Member of Versus Arthritis Physical Activity Expert Advisory Group and Expert Evaluation Group

• Professional Membership

- The Society for Transparency, Openness, and Replication in Kinesiology (<u>Founding Member</u>)
- o Strength and Conditioning Society (*Founding Member*)
- o American College of Sports Medicine (Professional Member)
- o British Association of Sport and Exercise Sciences (Professional Member)

o Fellow of the Higher Education Academy

Teaching & Supervision:

- o Postgraduate Supervision
 - Completions
 - Ph.D. DOS (Craig Perrin) Lumbar extensor fatigue in soccer and its impact upon sprint kinematics (2020)
 - Ph.D. External at Coventry University (Samuel Tuvey) Surveillance of children's fitness levels and association with academic attainment (2020)
 - Ph.D. External at Coventry University (Nikita Price) The effects of exercise referral schemes upon physical activity (2019)

Current

- Ph.D. DOS (Patrokolos Androulakis-Korakkakis) Minimum effective training dose required to increase 1RM strength in powerlifters
- Ph.D. DOS (Emily Budzynski-Seymour) Physical activity, fitness, and physical literacy surveillance in school children
- Ph.D. (Milo Wolf) Effects of range of motion on muscle hypertrophy in resistance training
- Ph.D. (Tom Gray) The effects of upper body carrying on running
- Ph.D. External at Coventry University (Nadja Willinger) Member retention strategies in the UK physical activity sector
- ERAMUS+ Internships
 - Cedrik Armes, Vrije Universiteit Amsterdam, Netherlands (MSc 2018)
 - Nick Michalopolous, University of Patras, Greece (MSc 2018)
 - Sarah Weber, University of Konstanz, Germany (MSc 2016)
- Undergraduate teaching, Solent University (2021 onwards)
 - Applied Research and Study Design in Health and Exercise Lv5
 - Research Project Lv6
- o Undergraduate teaching, Southampton Solent University (2011-2017)
 - Introduction to Physiology of Exercise Lv4
 - Applied Physiology of Testing and Training (unit leader) Lv5
 - Applied Principles of Biomechanics Lv5
 - Research Methods in Sport and Exercise Lv5
 - Professional Practice in Physiology of Exercise Lv6

• External Examiner/Subject Advisor

- o External Examiner BSc (Hons) Sport and Exercise Science at University of Wolverhampton 2017 Current
- o External Examiner MSc by Research in Exercise Physiology at Canterbury Christ Church University 2016 2018
- External Subject Advisor FDSc Sport and Exercise Science at Leicester College (Awarded by De Montfort University) 2015 – 2018

Journal Involvement – Editorial and Reviewer Roles

- Managing Editor and Section Editor (Physical Activity, Health, and Disease) Registered Reports in Kinesiology https://storkjournals.org/index.php/rrik/about/editorialTeam
- Managing Editor and Section Editor (Physical Activity, Health, and Disease) Communications in Kinesiology https://storkjournals.org/index.php/cik/about/editorialTeam
- Associate Editor (Exercise Physiology) Journal of Evolution and Health http://jevohealth.com/
- Research Topic Editor Frontiers in Neuroscience and Frontiers in Psychology "Effort-Based Decision-Making and Cognitive Fatigue" https://www.frontiersin.org/research-topics/12400/effort-based-decision-making-and-cognitive-fatigue
- Research Topic Editor Frontiers in Sports and Active Living "Understanding and Improving Performance in Strength Sports" - https://www.frontiersin.org/research-topics/14314/understanding-improving-performance-in-strength-sports
- O Guest Editor Biomed Research International special issue "Exercise for Health and Disease: Time to Move Ahead" https://www.hindawi.com/journals/bmri/si/498937/
- o Reviewer for several journals, see Publons https://publons.com/author/1263412/james-steele#profile
- Signatory of the Peer Reviewer Openness Initiative https://www.opennessinitiative.org/

University Committee positions held

- Solent University, Faculty of Sport, Health, and Social Sciences Research Advisory Group 2019 current
- o Solent University Professoriate, 2016 current
- Southampton Solent University Research Degrees Committee 2011 2013
- Southampton Solent University Research & Enterprise Committee 2011 2013

Media and Public Outreach

- TV appearances
 - How to Get Fit Fast aired 25/05/2018 on Channel 4
- Research featured in
 - Runner's World The minimalist guide to running and S&C https://www.runnersworld.com/uk/health/a36117586/strength-and-conditioning/
 - Outside Online "The Data Behind the Once-a-Week Strength Routine" by Alex Hutchinson https://www.outsideonline.com/2420657/ultra-minimalist-strength-workout-research
 - New York Times "How to Get Strong" guide by Anahad O'Connor, 2018 https://www.nytimes.com/guides/year-of-living-better/how-to-build-muscle-strength

Public talks

- "Resistance training for endurance performance: it may not work the way you think" delivered at ABP Southampton Marathon Meet the Experts Event 2018
- "What's the best way to exercise?" delivered at The Science Room 2016 https://sciroomsouthampton.wordpress.com/

Podcast Interviews

- Better Movement Podcast https://www.bettermovement.org/blog/2021/podcast-with-james-steele
- Discover Strength Podcast https://www.discoverstrength.com/podcast/predicting-proximity-to-failure/
- Research in Exercise And Cancer Health (REACH) podcast http://reachformore.libsyn.com/ep-53-dr-james-steele-minimal-dose-approach-to-resistance-training-can-we-actually-measure-effort
- High Intensity Business
 - Episode 340 https://highintensitybusiness.com/340-dr-james-steele-inter-individual-variation-in-response-to-resistance-training-the-truth-about-effect-sizes-and-other-exercise-science-flaws/
 - Episode 283 https://highintensitybusiness.com/podcast/283-dr-james-steele-does-increasing-an-athletes-strength-improve-sports-performance-part-1/
 - Episode 273 https://highintensitybusiness.com/podcast/273-james-steele-exercise-efficacy-vs-effectiveness/
 - Episode 167 https://highintensitybusiness.com/podcast/james-steele-effort/
 - Episode 119 https://highintensitybusiness.com/podcast/dr-james-fisher-and-dr-james-steele-workout-nihilism-vs-workout-optimisation/
 - Episode 61 https://highintensitybusiness.com/podcast/james-steele-maximizing-muscle-gain/
 - Episode 16 https://highintensitybusiness.com/podcast/james-steele-2/
 - Episode 10 https://highintensitybusiness.com/podcast/james-steele-phd-no-such-thing-as-cardio/
- Fazlifts podcast https://soundcloud.com/fazlifts/training-to-failure-volume-and-gym-pet-peeves-with-dr-james-steele
- Age Stronger http://agestronger.fit/dr-james-steele-easy-cardio-isnt-enough-time-public-health-advice-strength-training/