Dr Liz Bryant, PhD BSc (Hons)

Research Fellow, Chailey Heritage Clinical Services (0.6 FTE)

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Research interests

- Exercise/Physical Activity interventions
 - effect on muscle strength, bone density, joint range of motion and balance
- Exercise and rehabilitation

Profile

In January 2010 Liz joined the Chailey Heritage Research Team and is involved in a number of research projects aimed at "Improving the quality of life for children with complex disabilities and their families".

In 1999 Liz Bryant graduated as an exercise scientist, and in 2005 was awarded a PhD for a longitudinal study investigating the effect of lifestyle changes at retirement on several key physiological parameters related to falling in later life.

Liz is also employed as a Research Fellow within the Clinical Research Centre for Health Professions at the University of Brighton (0.4 FTE).

Teaching

Liz contributes to teaching in several modules on the Graduate Programme in Health and Social Sciences at the University of Brighton. She also acts as an advisor/supervisor for research project students (including PhD and MSc).

Research Awards

- £72,559 Sparks, the children's medical charity (2013). The introduction of Petra running-bikes to encourage and facilitate weight-bearing exercise for children with cerebral palsy who are unable to walk independently: a pilot study. (Pountney T, Bryant E and Walker-Bone K)
- £71,416 Physio First. *The snapshot survey data collection project 2012.* (Moore AP, Olivier GWJ and Bryant EC).
- £77,130 Physio First. The snapshot survey data collection project 2011. (Moore AP, Olivier GWJ and Bryant EC)
- £5,000 University of Brighton (Internal Research Grant 2011). The use of exercise and exercise prescription across the physiotherapy profession. (Glynn A, Bryant E, Kuisma R, Fiddler H, Hebron C, Canby G).
- £6,500 University of Brighton (Business Investment Fund). Development of a novel transdermal formulation for a combined Vitamin D and calcium supplementation to the elderly and lactate intolerant. (Pannala A and Bryant E).
- £61,120 Physio First. *The snapshot survey data collection project 2010.* (Moore AP, Olivier GWJ and Bryant EC).
- £30,000 Sussex Partnership NHS Foundation Trust (2009). A pilot RCT to assess the efficacy of a health enhancing exercise programme in slowing down cognitive impairment in patients with mild to moderate Alzheimer's disease. (Tabet N, Bryant E, Glynn A, Handyside D, Isaac M, Kuisma R, Moore A, Rusted J and Sadlo G).

- £4,350 University of Brighton (Brief Encounters Networking Award 2009). The development of a model to calculate energy expenditure for selected physical activities in an ageing population. E Bryant and R Chakrabarti.
- £51,658 Physio First. *The snapshot survey data collection project 2009.* (Moore AP, Olivier GWJ and Bryant EC).

Publications Journals

- Moore AP, Bryant EC, Olivier GWJ (2012). Development and use of standardised data collection tools to support and inform musculoskeletal practice. Manual Therapy 17 (6) 489-496.
- E Bryant, T Pountney, H Williams (2013). Can a six-week exercise intervention improve gross motor function for non-ambulant children with cerebral palsy? A pilot randomised controlled trial. Clinical Rehabilitation 27 (2) 150-159.
- J Underhill, E Bryant, T Pountney (2012). The effect of sleep systems on sleep-wake patterns and pain levels in non-ambulant children and young people with cerebral palsy. APCP Journal Vol 3, number 1; 57-64.
- E Bryant (2011). A five year longitudinal study highlighting the influence of physical activity levels on balance performance pre and post retirement. Physiotherapy. 97; Supplement 1; eS164- eS165.
- T Pountney, H Williams and E Bryant (2011) Effectiveness of an intensive six week graded exercise programme for non-ambulant children and young people with cerebral palsy. Physiotherapy. 97; Supplement 1; eS1016-eS1017.
- E Lewis, E Bryant, P Donnelly, S Lewis, A Moore, G Olivier, P Simpson, K Winrow (2011). A snapshot data collection survey on treatment interventions used for whiplash injury by physiotherapists in private practice. Physiotherapy. 97; Supplement 1; eS684.
- G McCarthy, E Green, O Ogunbona, H A Simmonds, L Fairbanks, T Pountney & E Bryant (2011). A
 population study of Lesch-Nyhan disease in the UK. Developmental Medicine & Child Neurology. 53;
 4-39.
- K Saber-Sheikh, E C Bryant, C Glazzard, A Hamel and R Lee (2010). *Feasibility of using inertial sensors to assess human movement.* Manual Therapy. 15: 122-125.
- Bryant E, Carter A, Cox S, Jackson A, Kuisma R, Pattman J and Ryan S-J (2009). The HyDAT tool: UK aquatic physiotherapy standardised data collect project 2009. Chartered Society of Physiotherapy, London. August 2009
- A Mandy, J McInnes, E Bryant (2007). *Patterns of employment of podiatrists following graduation: a 5 year retrospective study.* British Journal of Podiatry, 10 (2); 39-44.
- EC Bryant, ME Trew, AM Bruce and L Cheek (2007). Lower limb muscle strength and physical activity levels in healthy individuals approaching retirement. Journal of Sports Sciences. 25 (7), 835-842.
- Stew G, Sadlo G, Bryant EC, Cage M, Hodgson L and Fawkes CA (2007). Mindfulness and postgraduate student learning In: Secondary Education: Issues and Challenges. Nova Publishers, New York. ISBN: 978-1-60456-088-6.
- EC Bryant, ME Trew and AM Bruce (2006). *Case report: Activity after retirement*. Physiotherapy Research International. 11 (1); 51-55.
- EC Bryant, ME Trew, AM Bruce, RME Kuisma, AW Smith (2005). *Gender differences in balance performance at the time of retirement.* Clinical Biomechanics, 20 (3); 330-335.
- E Bryant and M Trew (2005). Lower limb muscle strength, joint range of motion, balance performance and physical activity levels in healthy individuals pre-retirement. Journal of Sports Sciences 23 (11-12) 1150-1151.
- E Bryant, M Trew, AM Bruce, R Kuisma, A Smith (2004). *Lower limb muscle strength and activity levels in people approaching retirement.* Journal of Physical Activity & Aging 12 (3):312-313.
- Bryant E (2000). A comparison of quantitative ultrasound of the calcaneus and dual energy x-ray absorptiometry of the distal forearm. Journal of Sports Sciences 18(1) 5-6.

Reports

- Bryant E, Carter A, Cox S, Jackson A, Kuisma R, Pattman J and Ryan S-J (2009). The HyDAT Tool: UK Aquatic Physiotherapy Standardised Data Collection Project. August 2009.
- Rankin G and Bryant E (2009) *Physiotherapy research capacity and capability: an analysis of the CSP database of researchers 2008*. Chartered Society of Physiotherapy, London. February 2009.
- Bryant EC, Olivier GWJ and Moore AP (2008). The development of a standardised data collection system for private physiotherapy practitioners: key findings from the 2007 national data collection study. Westbury Print Ltd., Wiltshire. August 2008.
- Moore AP, Bryant EC, Burge J et al. (2006). *Whiplash Associated Disorder: A one year standardised data collection project*. University of Brighton. ISBN 978-0-9552750-0-5.

Books

• Bryant EC (2005) PhD thesis, University of Brighton. The effect of retirement on lower limb strength, joint range of motion, balance performance and physical activity levels.

Reviewer

- JOURNALS
 - Age and Ageing; Clinical Biomechanics; Clinical Rehabilitation; Developmental Medicine & Child Neurology; Manual Therapy; Physiotherapy Research International.
- CONFERENCE ABSTRACTS
 Chartered Society of Physiotherapy Annual Congress; World Congress of Physical Therapy.
- GRANTS
 Chartered Society of Physiotherapy; Nancie Finnie Charitable Trust

Membership of Professional bodies

• British Association of Sport & Exercise Science (BASES).

Committee Membership

• University of Brighton, Faculty of Health & Social Sciences Research Ethics & Governance Committee (2008 – present).