

Conference Abstract

Investigating Anxiety in Highly Trained and Elite Cyclists

Carol Royle ^{1,*}, Derek Farrell ², and Mark Corbett ³

¹ PhD student, Faculty of Health and Life Sciences, Northumbria University. carol.royle@northumbria.ac.uk

² Trauma Psychology and Veterans Affairs, Northumbria University. derek.farrell@northumbria.ac.uk

³ School of Sport and Exercise Science, University of Worcester. m.corbett@worc.ac.uk

* Correspondence: (CR) carol.royle@northumbria.ac.uk

Received: 1 March 2024

Accepted: 18 March 2024

Published: 10 August 2024

Abstract

Introduction: Eye Movement Desensitisation and Reprocessing (EMDR) Therapy was originally developed to relieve distress related to traumatic memories (Shapiro., 1989a; 1989b). EMDR has been used to treat Post-Traumatic Stress and has proven its effectiveness in over twenty-four randomised trials (Shapiro, 2018). The EMDR Therapy sessions include compassion-focused interweaves if required for self-criticism or low self-worth if this comes up during the EMDR Therapy processing sessions. An initial qualitative study explored whether performance anxiety existed in five highly trained and elite cyclists. Some cyclists perceived self-criticism as a positive strategy for performance, but others perceived self-criticism as negative and felt that it impacted their cycling preparation and performance. Some cyclists found that having a crash affected their performance times and created hesitation when training or racing. A pilot study is being completed of cyclists who reported intrusive images of crashes which are continuing in the present and whose symptoms reached a subclinical level. These volunteers received five to six 1-hour sessions of virtual EMDR Therapy.

Methods: The effect of EMDR is examined using a multiple baseline across subject's design which means that the participants are assigned to baseline and post-treatment measurements at different time points. The diagnostic treatment measurements administered are evidence-based and include measurement instruments which are specific to sport. Assessments are being made pre-, midway, immediately post-therapy, and at three months and six months post-therapy.

Results: This study is ongoing and full results of the pilot study will be available for presentation in June 2024.

Conclusions: Initial results are promising, and the intervention has been shown to have a treatment effect.

Keywords: Cycling, Power Output, World Tour, Pro Team, Fatigue, Pacing Strategy

Funding: This research received no external funding

Conflicts of Interest: The authors declare no conflict of interest.



References

- Dover, G., & Amar, V. (2015). Development and Validation of the Athlete Fear Avoidance Questionnaire. *Journal of Athletic Training*, 50(6), pp.634-642.
- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41, pp. 209-218.
- Korn, D. L., Maxfield, L., Smyth, N., & Stickgold, R. (2018). *EMDR fidelity rating scale (EFRS): The manual*.
- Shapiro, F. (1989a). Eye movement desensitization and processing: A new treatment for post-traumatic stress disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 20, pp.211-217.
- Shapiro, F. (1989b). Eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress*, 2, pp.199-223.
- Shapiro, F. (2018). *Eye Movement Desensitization and Reprocessing (EMDR Therapy)*. 3rd ed. New York: The Guilford Press.
- Smith, R.E., Smoll, F.L., & Schutz, R.W. (1990). Measurement and correlates of sport-specific cognitive and somatic trait anxiety: the sport anxiety scale. *Anxiety Research*, 2, pp. 263–280.
- Spitzer, RL., Kroenke, K., Williams, JB & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine*, 22, 166(10), pp.1092-1097.
- Thomas, O., Hanton, S., & Maynard, I. (2002). An alternative approach to short-form self-report assessment of competitive anxiety. *International Journal of Sport Psychology*, 33, pp. 325-336.
- Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson & T.M. Keane (Eds.), *Assessing Psychological Trauma and PTSD*. New York: Guilford. pp.399-411.