



Annex A – Studentship Application Form

Title of proposed research – Health & Wellbeing pathway
An evaluation of the ‘Surfwell’ program for promoting mental health and wellbeing among emergency service personnel: A case study of Devon and Cornwall Police force.
Your research proposal.
<p>IMPORTANT: There is a <u>strict</u> 1300-word limit, fully inclusive of everything except references. This includes all the written text, quotes, in-line citations, section headers, captions, the contents of tables and any foot-/endnotes. Each figure/graphic should be counted as equivalent to 200 words. Tables should be counted as the number of words they contain. Proposals that are found to be overlength will be rejected. Remember that if you are applying to one of our interdisciplinary programmes, a clearly articulated interdisciplinary approach should be evident.</p>
<p>1.1 Research potential</p> <p>In the United Kingdom (UK), the COVID-19 pandemic has negatively affected public mental health and the ability of mental health services to cope with demand (1). Emergency service workers are at increased risk of mental health disorders compared to non-emergency services personnel (2); elevated stress levels from routine work stressors and repeat exposure to trauma may increase the risk of post-traumatic stress disorder (PTSD), secondary traumatic stress, anxiety, and depression among police officers and staff (3-5). A recent review identified, among 40,299 UK police officers and staff surveyed, probable depression was roughly 10%, anxiety 8.5%, and PTSD roughly 4% (6). Another survey of 16,857 police officers and staff reported 20% have PTSD symptoms (7). A review of 30,878 ambulance personnel worldwide indicated prevalence rates for PTSD were 11%, depression and anxiety rates were 15%, and general psychological distress were 27% (8)</p> <p>Mental ill health is a key cause of presenteeism and absenteeism which adversely impacts occupational functioning (9), and directly impacts readiness to emergencies (6). It is recommended that emergency services support recently trauma-exposed staff (6); however, help-seeking among first responders is typically delayed due to ‘stigma’ (10) and police culture, which may inhibit open and honest discussion around mental health issues (11). In addition, the National Health Service (NHS) mental health services are not designed or sufficiently resourced to meet the needs of emergency services: long waiting times, stepped care model. Emergency services have invested in peer support, occupational health and</p>



employee health assistance programmes e.g., the Blue Light Together package (12); however, there is a need for bespoke interventions.

An emerging treatment for mental ill health, is surf therapy. Surf therapy programmes provide opportunity to take on the challenge of learning to surf and to experience surfing in a non-judgemental, supportive group (13). Surf therapy combines physical activity, exposure to nature, and peer support, all of which are reported to have beneficial effects on mental health (14-16), and specific mental health conditions such as depression and anxiety (17, 18), and PTSD (19-21).

'Surfwell' is a surf therapy, well-being initiative within the Devon and Cornwall Police force (DCP). DCP faces the highest long term (>28 days) absences due to sickness (22), with 38.4% of sickness absence due to mental health (DCP Sickness absence data, 2021). Surfwell enables police officers to attend a supervised surfing session, alongside a peer-support group talking therapy session, aiming to promote their wellbeing and health. Surf therapy research is currently limited to poor quality studies (e.g., no randomised controlled trials, small sample size) within military populations from the United States of America (U.S) (18, 23). Robust research, among the UK population, is needed to confirm the effectiveness of surf therapy and ensure generalisability of results. Furthermore, the literature has not identified any processes behind, or moderators involved in positive change; without this, data collection and analysis cannot be directed effectively. Surfwell is already established; therefore, collaboration with DCP provides a perfect opportunity for higher quality research, with experienced surf-therapy practitioners, to address gaps in the literature.

An unpublished report by the University of Exeter (2021) independently evaluated Surfwell. The report found immediate personal gains such as positive changes in mood, motivation, confidence, sense of achievement, and acceptance of mental health difficulties. Furthermore, the report cited self-reported sustained benefits (6-8 weeks) such as greater resilience, optimism, self-efficacy, and improved perception of difficulties. Although this report provides support for Surfwell, it has several limitations. Firstly, no control group was included in the study; therefore, conclusions regarding the efficacy of Surfwell cannot be drawn. Secondly, immediate benefits were measured using unvalidated questions (24). Thirdly, the sample size was small ($n=20$). Overall, the evaluation uncovered positive trends in



thoughts around Surfwell; however, well designed follow up research, using higher quality design, with quantitative and qualitative evaluation is needed to confirm the positive impact of Surfwell.

Therefore, this research aims to: (i) Work with stakeholders (DCP) to create a logic model to direct data collection and analysis towards the main parts of Surfwell (ii) Conduct a high quality randomised controlled trial investigating Surfwell's impact on mental health (iii) Conduct an evaluation, using qualitative and quantitative methods to investigate barriers and facilitators of surf therapy access, and to inform theory regarding the mechanism of action of surf therapy.

1.2 Research Design

i. Research Question

Does the Surfwell intervention lead to a sustained change in mental health among Devon and Cornwall Police officers and staff?

ii. Research Method Overview

The proposed PhD will be collaborative with DCP. Surfwell would be classed as a complex intervention by the Medical Research Council (MRC) and National Institute for Health Research (NIHR), thus the proposed research will use MRC and NIHR complex interventions research guidance (25). The research will consist of three phases (Figure 1).

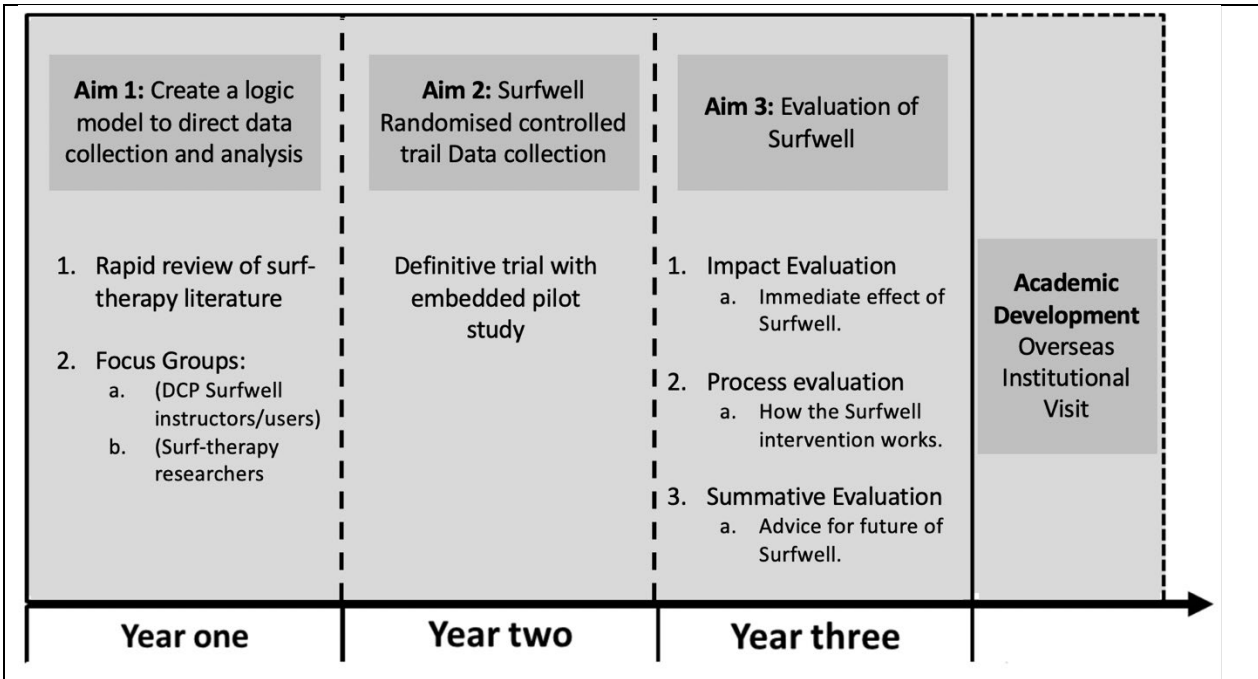


Figure 1. Diagram Overview of Research Proposal

iii. Ethical Issues

Ethical approval will be attained from a University of Exeter Research Ethics Committee. All research will follow the University’s Ethics guidance.

Participants may demonstrate CMD’s at baseline, there may be worsening of symptoms potentially leading to suicidal episodes. Therefore, this study will:

- Not deny treatment or discourage treatment seeking.
- Follow established protocols for the detection and management of suicide risk.

iv. Beneficiaries and Impact

The study will benefit individuals through a sustained improvement in mental health. This will subsequently benefit emergency services and the communities they serve. The study supports the ESRC’s strategic priority for mental health research. There is potential to offer Surfwell all emergency service personnel. Additionally, Surfwell findings may be generalisable to UK military populations,



since, PTSD and common mental disorders (CMD) rates are reported to be similar in UK police force and military personal (6, 26). Within the Police, the National Police Wellbeing Service have already funded some Surfwell sessions in the wider police force.

Surfwell could be used to complement the wider Force's, health and wellbeing strategy and mental wellbeing plan. There is an existing peer support network and Surfwell has the potential to become a bespoke peer support intervention combining group support with a blue health approach to wellbeing (27). The findings will inform future wellbeing planning and policy.

In addition to the direct collaborators at DCP, external surf therapy organisations have expressed interest in the project such as 'Resurface UK' and 'Surf Therapy CIC'. Resurface UK provides surf therapy retreats specifically designed for resilience and trauma recovery. Surf therapy CIC individuals who are ex-military or emergency frontlines workers. These organisations will provide avenues for knowledge exchange and allow establishment of networks and relationships with research users; meaning this PhD will offer high potential for real societal impact outside of academia.

Word count (please complete): 1298

References (Bibliography) (not included in your Word count)

1. British Medical Association. The impact of COVID-19 on mental health in England; Supporting services to go beyond parity of esteem. 2020.
2. Stevelink SAM, Pernet D, Dregan A, Davis K, Walker-Bone K, Fear NT, et al. The mental health of emergency services personnel in the UK Biobank: a comparison with the working population. *European Journal of Psychotraumatology*. 2020;11(1):1799477.
3. Violanti JM, Burchfiel CM, Miller DB, Andrew ME, Dorn J, Wactawski-Wende J, et al. The Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) Pilot Study: Methods and Participant Characteristics. *Annals of Epidemiology*. 2006;16(2):148-56.
4. Cartwright A, Roach J. The Wellbeing of UK Police: A Study of Recorded Absences from Work of UK Police Employees Due to Psychological Illness and Stress Using Freedom of Information Act Data. *Policing: A Journal of Policy and Practice*. 2020.



5. MIND. Wellbeing and mental health support in the emergency services: our learning and key recommendations in the emergency services 2019 [Available from: https://www.mind.org.uk/media-a/4524/20046_mind-blue-light-programme-legacy-report-v12_online.pdf].
6. Stevelink SAM, Opie E, Pernet D, Gao H, Elliott P, Wessely S, et al. Probable PTSD, depression and anxiety in 40,299 UK police officers and staff: Prevalence, risk factors and associations with blood pressure. *PLOS ONE*. 2020;15(11):e0240902.
7. Police Care UK. Policing: The Job & The Life. University of Cambridge; 2019.
8. Petrie K, Milligan-Saville J, Gayed A, Deady M, Phelps A, Dell L, et al. Prevalence of PTSD and common mental disorders amongst ambulance personnel: a systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*. 2018;53(9):897-909.
9. Rona RJ, Jones M, Iversen A, Hull L, Greenberg N, Fear NT, et al. The impact of posttraumatic stress disorder on impairment in the UK military at the time of the Iraq war. *Journal of Psychiatric Research*. 2009;43(6):649-55.
10. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*. 2015;45(1):11-27.
11. Edwards A-M, Kotera Y. Mental Health in the UK Police Force: a Qualitative Investigation into the Stigma with Mental Illness. *International Journal of Mental Health and Addiction*. 2021;19(4):1116-34.
12. Foundation TR. THE DUKE ANNOUNCES LANDMARK 'BLUE LIGHT TOGETHER' COMMITMENT AT EMERGENCY RESPONDER MENTAL HEALTH SYMPOSIUM 2021 [updated 25 November 2021. Available from: <https://royalfoundation.com/the-duke-of-cambridge-announces%E2%80%AF%E2%80%AFlandmark-blue-light-together%E2%80%AFcomitment-at-emergency-responder-mental-health-symposium-symposium/>].
13. Walter KH, Sarkisian GV, Martínez G, Ward PB. Surf Therapy Practice, Research, and Coalition Building: Future Directions. *Glob J Community Psychol Pract*. 2020;11:1-11.



14. Marshall J, Kamuskay S, Samai MM, Marah I, Tonkara F, Conteh J, et al. A Mixed Methods Exploration of Surf Therapy Piloted for Youth Well-Being in Post-Conflict Sierra Leone. *International Journal of Environmental Research and Public Health*. 2021;18(12).
15. Marshall J, Kelly P, Niven A. "When I Go There, I Feel Like I Can Be Myself." Exploring Programme Theory within the Wave Project Surf Therapy Intervention. *International Journal of Environmental Research and Public Health*. 2019;16(12).
16. McKenzie RJ, Chambers TP, Nicholson-Perry K, Pilgrim J, Ward PB. "Feels Good to Get Wet": The Unique Affordances of Surf Therapy Among Australian Youth. *Frontiers in Psychology*. 2021;12.
17. Rebar AL, Stanton R, Geard D, Short C, Duncan MJ, Vandelanotte C. A meta-meta-analysis of the effect of physical activity on depression and anxiety in non-clinical adult populations. *Health Psychology Review*. 2015;9(3):366-78.
18. Walter KH, Otis NP, Ray TN, Glassman LH, Michalewicz-Kragh B, Powell AL, et al. Breaking the surface: Psychological outcomes among U.S. active duty service members following a surf therapy program. *Psychology of Sport and Exercise*. 2019;45:101551.
19. Rosenbaum S, Vancampfort D, Steel Z, Newby J, Ward PB, Stubbs B. Physical activity in the treatment of post-traumatic stress disorder: a systematic review and meta-analysis. *Psychiatry research*. 2015;230(2):130-6.
20. Caddick N, Smith B. The impact of sport and physical activity on the well-being of combat veterans: A systematic review. *Psychology of sport and exercise*. 2014;15(1):9-18.
21. Rogers CM, Mallinson T, Peppers D. High-Intensity Sports for Posttraumatic Stress Disorder and Depression: Feasibility Study of Ocean Therapy With Veterans of Operation Enduring Freedom and Operation Iraqi Freedom. *American Journal of Occupational Therapy*. 2014;68(4):395-404.
22. Her Majesty's Inspectorate of Constabulary and Fire Rescue Services. Value for money dashboards 2020 [updated 13 March 2021. Available from: <https://www.justiceinspectors.gov.uk/hmicfrs/our-work/article/value-for-money-inspections/value-for-money-profiles/value-for-money-dashboards/>.



23. Glassman LH, Otis NP, Michalewicz-Kragh B, Walter KH. Gender Differences in Psychological Outcomes Following Surf Therapy Sessions among U.S. Service Members. *International Journal of Environmental Research and Public Health*. 2021;18(9):4634.
24. Michaelson J, Mahony S. *Measuring Wellbeing*. New Economics Foundation; 2012.
25. Skivington K, Matthews L, Simpson SA, Craig P, Baird J, Blazeby JM, et al. Framework for the development and evaluation of complex interventions: gap analysis, workshop and consultation-informed update. *Health Technology Assessment*. 2021;25(57):1-132.
26. Stevelink SAM, Jones M, Hull L, Pernet D, Maccrimmon S, Goodwin L, et al. Mental health outcomes at the end of the British involvement in the Iraq and Afghanistan conflicts: a cohort study. *The British Journal of Psychiatry*. 2018;213(6):690-7.
27. The Wave Project. INTO THE BLUE: HEALTH AND SURFING IN THE 21ST CENTURY 2020 [updated 14 August 2020. Available from: <https://www.thewave.com/into-the-blue-health-and-surfing-in-the-21st-century/>].