

Mapping UNSW Impact Global Development

Primary SDG	3: GOOD HEALTH AND WELL-BEING
Broad theme	Physical activity and mental illness
Research	Using physical activity to improve mental health among refugees
Impact region	Turkey, Bangladesh
Faculty	Medicine
School/Institute	Psychiatry
Academic	Dr Simon Rosenbaum
Project partners	N/A
Related SDGs	10: Reduced Inequalities
	11: Sustainable Cities and Communities
	4: Quality Education

Elevator pitch

Simon is exploring the use of physical activity programs, such as dancing, football and cricket, to help refugees in Turkey and Bangladesh experience a greater sense of well-being and reduce the impact and severity of mental illness among them.

The Challenge: Displaced refugees are at high risk of experiencing mental illness

Displaced from their homes, refugees experience idleness and boredom, often without the right to work in their new country of origin. They are also, like the rest of the world, eating higher levels of processed food, salt and sugar. This increases the risk of non-communicable diseases (NCDs), such as cardiovascular disease and strokes, as well as obesity and diabetes. Some might be experiencing posttraumatic stress disorder (PTSD). People with PTSD are more likely to experience NCDs. Without access to health and medical advice or physical activity, refugees continue to suffer from mental illness symptoms and the increasing risk of experiencing NCD.

UNSW's solution: Trial physical activity programs with the aim of increasing well-being

Simon's work is focussed on the use of physical activity to promote mental and physical health. He commenced this work with emergency workers in NSW, using physical activity as a part of treatment for PTSD symptoms. Participants are given a Fitbit and undertake a 10 week physical training program that is supervised by a professional exercise physiologist. Simon observed the benefits of physical activity were hugely significant, noting large decreases in PTSD and depression-related symptoms among the people he worked with. He continues to undertake this work under his NHMRC Fellowship, recruiting emergency service workers online through Facebook, and targeting the partners of workers.

Together with Ruth Wells (UNSW), Simon is now planning to train social workers to run physical training programs for female Syrian refugees living in Turkey. The social workers are local refugees themselves. Simon and Ruth are currently investigating the possibility of a combined exercise and dancing program at a local gym for a pilot period of 10 to 12 weeks. They are looking to train the social workers online to design an appropriate program. Needing at least \$20,000 in funding, Simon is considering crowdfunding. The pilot will inform larger scale studies.

In Bangladesh, Simon is working with colleagues to provide sport programs for Rohingya refugees living temporarily in displacement camps. He has visited the camps and spoken to informal football (soccer) and cricket teams that have formed there. Team members confirmed that sport helps to alleviate the stress of their situation, but they lack basic sporting equipment and structure. Simon is looking to provide this gear and structure around training and playing. He will then evaluate participants to determine the benefits (if any) for mental well-being among the players.

Simon has also teamed up with Phil Ward to trial a clinical tool that measures physical activity. The tool comprises a short interview that measures activity and sedentary behaviour. It is being trialled in 40 sites across 24 countries.

The Impact: Improve individual well-being and mental health

Simon's work with emergency workers is helping to prevent and treat PTSD and other depression related illnesses, improving individual well-being. The trial to validate a physical activity measurement tool for clinicians will help doctors around the world to gauge a patient's amount of physical activity and the potential for increased activity to alleviate mental illness symptoms.

Simon's preliminary work in Turkey with Syrian refugees has the potential to help alleviate stress, depression and other mental illnesses among refugee women. Similar potential exists in Bangladesh, where equipment and a more regimented sport program will provide a foundation to measure the benefits of activity among refugee well-being. A sporting program will also help foster more social cohesion among refugees and the local community, with members from both participating in games. Broader benefits include improving a refugee's chance of productivity and success in the host community and minimising the risk of anti-social behaviour (such as violence or terrorist activity).

Researcher

Dr Rosenbaum is a UNSW Scientia Fellow and NHMRC Research Fellow within the School of Psychiatry at UNSW and an honorary fellow at the Black Dog Institute. He previously held a Society for Mental Health Research Early Career Fellowship (2016), he is National Director of Exercise and Sports Science Australia, and he recently co-edited *Exercise-Based Interventions for Mental Illness: Physical Activity as Part of Clinical Treatment*, which is due out August 2019. Simon is passionate about the role of exercise and physical activity as a strategy to improve the physical and mental health of vulnerable members of society.

Ben Falkenmire 02.07.18