

The Heartfulness Project



Background

The Heartfulness Project is a new project looking into how an integrative mind-body approach can benefit those individuals who suffer from heart conditions or who are at risk of developing heart disease through either hereditary or life events. Developed by Dr Maya Campbell, research scientist and mindfulness teacher and clinical psychologist Dr Tamara Russell, the course draws on the lived experience of Maya Campbell who had a heart attack leading to heart failure. Subsequently she gave evidence at the All Party Parliamentary Select Committee on Heart Failure and argued for the need for greater psychological support for heart patients. Dr Tamara Russell, Director of the Mindfulness Centre of Excellence, brought her expertise in creative co-design of mindfulness programs to develop an innovative program which started from the experience of the participants.

The Course

The course consists of a 10-week program of the participants learning the skills of mindfulness, compassion and mindful movements based on tai chi. Six participants were recruited from the general public with the aid of the British Heart Foundation and heart support groups in London. It was a mixed group with participants with a variety of cardiac conditions. The exercises and activities were developed to support the parasympathetic nervous system of the individuals (see Science section below) and reduce the anxiety and fear typically found in this population. With themes of **compassion, curiosity and creativity**, participants were invited to explore their lives. They determined how best to use the skills learnt on the course to continue to develop increased self-compassion and intentions to self-care (as best as one can).

Outcomes

The program was evaluated using quantitative and qualitative methods by two master's students from King's College London. The intervention showed a significant decrease in depression (HADS¹) and a significant decrease in the emotional impact of the disease on quality of life (MLHFQE²). Additionally, there was a significant increase in mindfulness non-reactivity (FFMQNR³) indicating a greater emotional resilience.

¹ Hospital Anxiety and Depression Scale - Depression

² Minnesota Living with Heart Failure Questions – Quality of Life- impact on emotions

³ Five Facet Mindfulness Questionnaire – Non Reactivity Scale

The qualitative data showed good acceptability of the course by the participants, with themes of developing **greater self-awareness, increased ability to manage distressing emotions, increased self-care with a healthier more active lifestyle**. Changes in internal narrative were noted, with all participants experiencing a more healthy and supportive inner voice.

“I’m doing really well applying the learning from the course. It’s completely transformed my life... I’ve been mindful of the need to practice the exercises and to remember self-care – and I have emerged into the new year feeling really good (resilient in the face of external challenges and my own wobbles).”

On a two month follow up meeting:

One participant who had been scheduled for a second major heart valve operation in the new year was told that it was no longer needed.

One participant, who had had a major myocardial infarction and who had been at risk of heart failure, improved enough to be discharged from cardiology.

A 76-year-old woman who had often been bed bound by depression after developing angina was back doing her preferred activity of walking and taking part in marathons.

As one participant with cardiomyopathy noted that she was getting ‘my old life back again’

Science

Individuals who have suffered a myocardial infarction, have heart failure or who have had a heart attack, experience a loss of parasympathetic (vagal) innervation of the heart. This is loss of autonomic control of the heart.

Loss of parasympathetic innervation exposes the heart to unopposed stimulation by sympathetic nerves resulting in heart damage. This is seen in the heart rate variability (HRV) recordings with a reduced HRV and a greater proportion of low frequency (LF) in the power spectrum. There is a strong correlation of reduced HRV and mortality in this population.

There are two inputs to the HRV. Autonomic nervous system consisting of sympathetic and parasympathetic nerves and the respiratory sinus arrhythmia (RSA). These two systems work in opposition to produce the HRV. The RSA represents a “cardio-pulmonary reserve”. When deep and slow breathing patterns are obtained through training such as Tai Chi, RSA avoids unnecessary heart beats during expiration providing a physiologic respite for the cardiopulmonary system.

How you can help....

Partners: We are looking for partners who can help by providing a space to run the course (see below) and to promote and support the facilitation of this course to a range of people.

Space to run the course: We require a warm room with seating for up to 12 participants with access for disabled individuals. The course will be run during the day for 2 hours with a 30 min pre and post session time for clear up and reflection resulting in a 3-hour slot. **Please contact Maya at maya.campbellx@googlemail.com for more information.**