

# Mindfulness Meditation Groups for People with Huntington's Disease

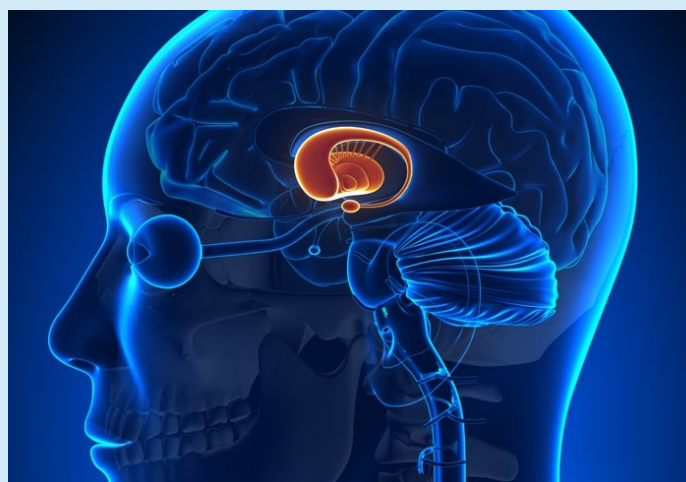
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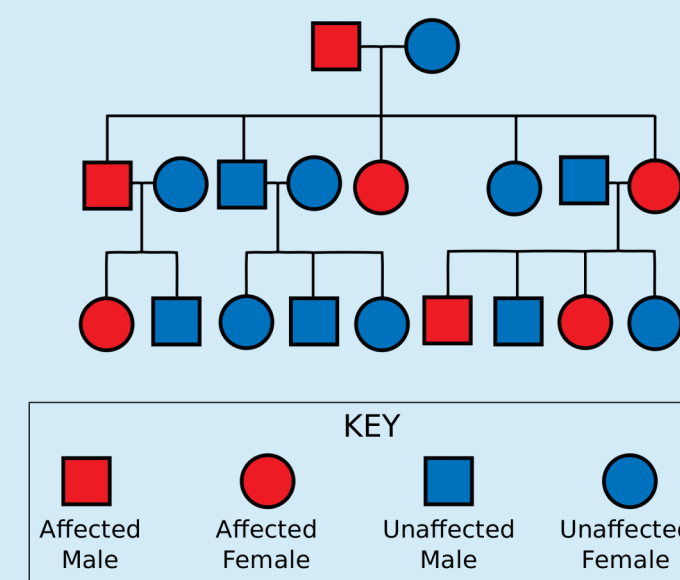
Supervisors: Prof Julie Stout & Dr Richard McQuade

## Huntington's Disease – What is it?

Huntington's Disease (HD) is a **progressive genetic disorder**. An individual has 50% chance of receiving the disease if one or both of their parents have the HD gene but 0% chance if neither do (see diagram to the right).



The disease affects cognition, emotion and movement by killing specific nerve cells in the basal ganglia of the brain (left image). Symptoms develop between ages 30 - 50 years and is most prevalent in Europe, North America and Australia.



Many years before the characteristic chorea (involuntary jerking) symptoms develop, people may experience changes in personality, mood or memory. This can result in otherwise high functioning adults unable to continue work due to attention and memory deficits or impaired judgment. People with these symptoms have 'early' or pre-symptomatic' HD and are the focus of this study, patients suffering from a later stage may not be able to take part due to the attentional demands of mindfulness.

**Investigating ways to provide HD patients with support and coping mechanisms is imperative as no cure exists.**

## Aims of study

- Create a successfully adapted and feasible MBSR programme for HD patients
- Investigate a range of potential benefits using questionnaires and cognitive tasks.

If the programme is deemed well adapted, feasible and have benefitted the HD participants the research will be developed and investigated with a control group.

## Mindfulness – What is it?

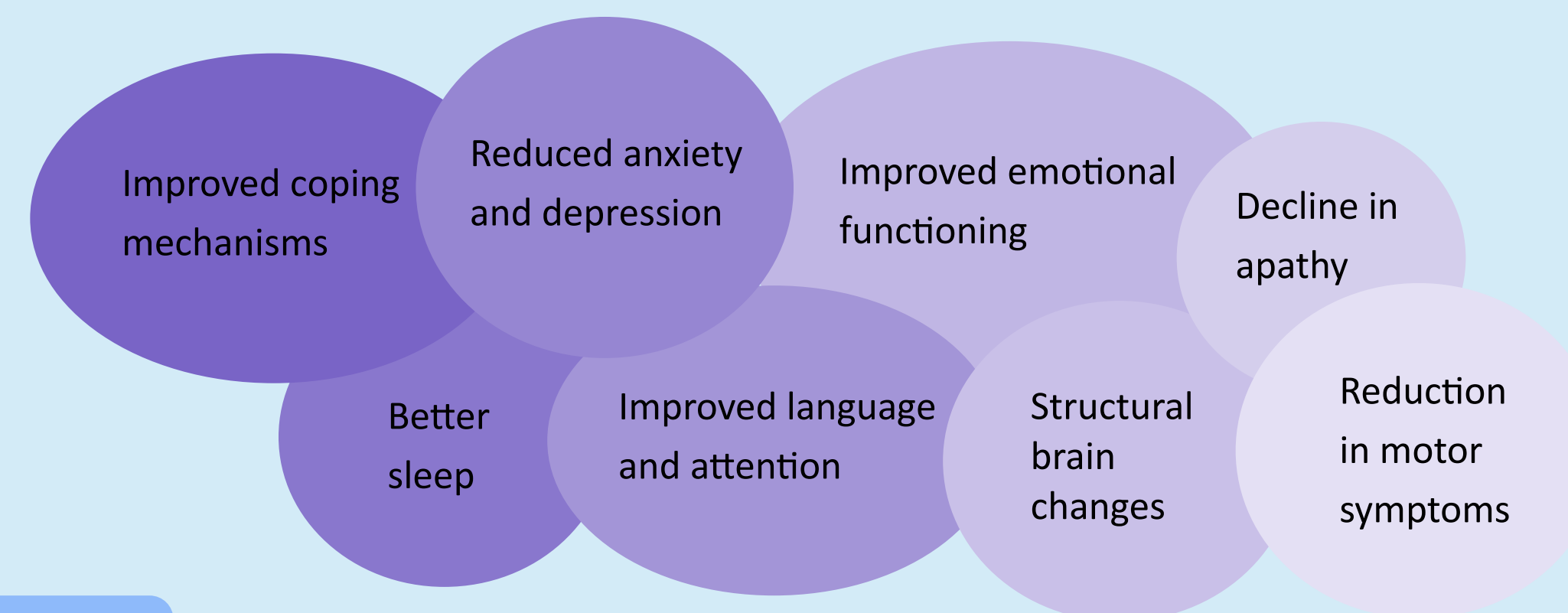
Mindfulness is a meditation that focuses on **awareness of the present moment, non-judgmentally**. It trains the brain to stop, and just observe. For over a decade it has been used to reduce stress, anxiety and depression.



## Literature Review

Recently mindfulness has been found to improve functions such as attention, memory and emotional control. Since these are symptoms patients with early symptomatic HD suffer from there is good reason to investigate whether a HD population could benefit from a mindfulness based stress reduction (MBSR). Mindfulness has also shown to benefit individuals suffering from similar diseases such as Alzheimer's and Parkinson's.

**Results from studies using mindfulness in Parkinson's and Alzheimer's:**



## Method

Participants will meet weekly for the MBSR, it will last 90 minutes on the same day of every week for 8 weeks. They should complete 30 minutes of their own mindfulness meditation 6 days a week.

**Questionnaires** will evaluate mindfulness, anxiety, depression, stress, emotional regulation, distress tolerance and quality of life before and after the programme.

**Cognitive assessments** will assess working memory, processing speed and both sustained and switching attention before and after the programme.

## Hypotheses

We expect that HD patients will benefit from the MBSR in the following ways:

- As mindfulness increases we predict anxiety, depression, stress, emotion regulation, distress tolerance and quality of life to improve
- Post MBSR we expect working memory, processing speed and sustained and switching attention to improve
- We expect these findings to correlate with how much individuals have practiced mindfulness

## References

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