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Rosemary aroma may help you remember to do things

The aroma of rosemary essential oil may improve prospective memory in healthy adults – say Northumbria researchers.

Jemma McCready and Dr. Mark Moss presented their findings at the Annual Conference of the British Psychological Society in April. Their study, conducted at Northumbria University, suggests that this essential oil may enhance the ability to remember events and to remember to complete tasks at particular times in the future.

Dr. Mark Moss, Head of Psychology, said: “We wanted to build on our previous research that indicated rosemary aroma improved long-term memory and mental arithmetic.

“In this study we focused on prospective memory, which involves the ability to remember events that will occur in the future and to remember to complete tasks at particular times this is critical for everyday functioning. For example, when someone needs to remember to post a birthday card or to take medication at a particular time.”

Rosemary essential oil was diffused in to a testing room by placing four drops on an aroma stream fan diffuser and switching this on five minutes before the participants entered the room. Sixty-six people took part in the study and were randomly allocated to either the rosemary-scented room or another room with no scent.

In each room participants completed a test designed to assess their prospective memory functions. This included tasks such as hiding objects and asking participants to find them at the end of the test and instructing them to pass a specified object to the researcher at a particular time. All the tasks had to be done with no prompting. If the task was not performed then different degrees of prompting were used. The more prompting that was used the lower the score.

Participants completed questionnaires assessing their mood and their blood was analysed to see if performance levels and changes in mood following exposure to the rosemary aroma were related to concentrations of a compound (1,8-cineole) present in the blood. The compound is also found in the essential oil of rosemary and has previously been shown to act on the biochemical systems that underpin memory.

The results showed that participants in the rosemary-scented room performed better on the prospective memory tasks than the participants in the room with no scent. This was the case for remembering events and remembering to complete tasks at particular times.

Jemma McCready explained: “There was no link between the participants’ mood and memory. This suggests performance is not influenced as a consequence of changes in alertness or arousal.”

The results from the blood analysis found that significantly greater amounts of 1,8-cineole were present in the plasma of those in the rosemary scented room, suggesting that the influence of aroma was mediated pharmacologically.

Jemma added: “These findings may have implications for treating individuals with memory impairments. It supports our previous research indicating that the aroma of rosemary essential oil can enhance cognitive functioning in healthy adults, here extending to the ability to remember events and to complete tasks in the future.

“Remembering when and where to go and for what reasons underpins everything we do, and we all suffer minor failings that can be frustrating and sometimes dangerous. Further research is needed to investigate if this treatment is useful for older adults who have experienced memory decline.”

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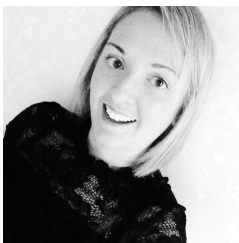
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