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**Duah, Francis; Croft, Tony; Inglis, Matthew**

**Can peer assisted learning be effective in undergraduate mathematics?**

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Summary: We report the implementation and evaluation of a ‘peer assisted learning’ (PAL) scheme designed to reduce the so-called ‘cooling off’ phenomenon in undergraduate mathematics. ‘Cooling off’ occurs when mathematics undergraduates lose motivation and interest in their studies, despite having previously actively chosen to study it at higher levels. We found that, despite concerns about the novel didactic contract inherent in PAL schemes, a majority of students chose to engage with the scheme, and that the student leaders of the PAL sessions were generally capable of implementing a student-centred pedagogy. Furthermore, we found that students who attended the PAL sessions had higher achievement in their final examinations, even after controlling for their lecture attendance and prior attainment. We conclude by arguing that PAL may provide a useful mechanism for reducing the prevalence of the ‘cooling off’ phenomenon in some – but not all – groups of mathematics students.

*Classification:* D45 C25 H65

*Keywords:* undergraduate mathematics; cooling off; peer assisted learning; motivation

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