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Are children's creativity and innovation influenced by where they grow up?

Background

Humans are by a distance the most creative and innovative species on the planet. Yet, paradoxically, children are remarkably poor at simple measures of creativity and innovation, such that other animals, including crows and some primates outperform them. After a decade of research, we still have little understanding of why, despite being landmark skills of our species, children find being innovative and creative so difficult. A vibrant body of work in urban planning has shown that in adults, technological innovations are disproportionately awarded in large cities compared to small ones or rural areas – perhaps because of the greater social interactions, diversity, or opportunities to learn innovative and creative skills.

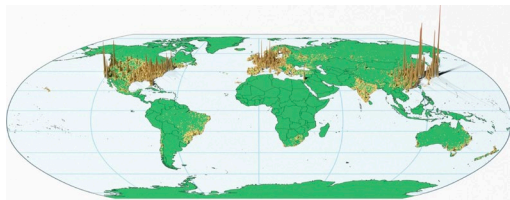


Fig. 1. Research in adults shows that, globally, innovations are disproportionately concentrated in large urban areas, compared to smaller, rural areas (spikes represent cumulative sums of patent counts over the past 20 years). This project will experimentally study whether we see the same pattern in children.

Aims and Methods

This project will integrate work from developmental psychology, industry, and urban planning to investigate whether children's innovation and creativity are influenced by where they grow up. It will examine whether children who live in larger, more ethnically, economically, educationally, technologically, and socially diverse cities are more or less innovative and creative than those from smaller, less

diverse cities, and if so, what factors explain these effects. It will involve measuring innovation and creativity in children in different UK cities ranging in population size and other key variables.

Relevance

The project bridges interests of various psychology subdisciplines, including developmental psychology, cognitive science, educational psychology, and social psychology. It also has broader impacts for industry, economics, and school curricula. For instance, there has been a strong recent focus on understanding how we can harness creativity in children from a young age, and what role education plays in the development of creativity.

Training

The candidate's research activity will be based in Durham, Psychology. Besides a training in general research skills, the candidate will develop a deeper understanding of developmental psychology, cross-population research, and experimental psychology. The candidate will receive an advanced training in multivariate statistics, multi-level analyses, and experimental design.

Suitable for

PhD and MSc by Research students. Please do get in touch to discuss.

References and Further Reading

Rawlings, B. After a decade of tool innovation, what comes next? *Child Development Perspectives*. 16, 118–124 (2022). <https://doi.org/10.1111/cdep.12451>

Broekel, T., Knuepling, L. & Mewes, L. Boosting, sorting and complexity—urban scaling of innovation around the world. *Journal of Economic Geography*. (2023) doi:10.1093/jeg/lbad006.