

Play brick therapy to aid the social skills of children and young people with autism spectrum disorder: the I-SOCIALISE cluster RCT

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Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at <https://doi.org/10.3310/VGTR7431>.

Primary conflicts of interest: Gina Gomez de la Cuesta co-authored the LEGO® (LEGO System A/S, Billund, Denmark) based therapy manual that formed the basis of the intervention delivered in the trial with the permission of all co-authors. Gina Gomez de la Cuesta worked as a sole trader training professionals in LEGO® based therapy from 2015 to 2018. In 2018, Gina Gomez de la Cuesta founded Bricks for Autism CIC (now Play Included CIC), a community interest company, to continue to offer training in LEGO® based therapy, and has received a salary as an employee of the company. On 30 March 2021, the LEGO Foundation (Billund, Denmark) and Play Included CIC officially launched a partnership to scale training, awareness, accessibility and research into the Brick-by-Brick programme internationally. With the agreement of the LEGO Foundation, the term 'LEGO® based therapy' is used in this report, and any related papers or presentations, but in future research and unconnected publications the term 'Play Brick Therapy' will be used instead. Cindy Cooper is a member of the National Institute for Health and Care Research (NIHR) Clinical Trials Unit (CTU) Standing Advisory Committee (2016–present) and the UK Clinical Research Collaboration Registered Clinical Trials Units

Network Executive Group (2015–present). Simon Gilbody reports membership of the NIHR Health Technology Assessment (HTA) Efficient Study Designs (2017–20), the NIHR HTA Funding Committee Policy Group (formerly Clinical Studies Group) (2017–20), NIHR HTA Clinical Evaluation and Trials Committee (2008–14) and NIHR HTA Commissioning Committee (2016–20).

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Plain language summary

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Plain language summary

Autism spectrum disorder is characterised by difficulties with social relationships and communication, which can make it difficult to make friends. Social skills training is commonly used to help children and young people learn different social skills, but some children and young people do not enjoy these therapies. LEGO® (LEGO System A/S, Billund, Denmark) based therapy takes a new approach by focusing on making the process interesting and fun.

This research investigated the effect of LEGO® based therapy groups in schools on the social and emotional abilities of children and young people with autism spectrum disorder. It was a randomised controlled trial, so each school that was taking part was randomly chosen to provide either usual support (from the school or NHS services) or 12 sessions of LEGO® based therapy with a trained school staff member as well as usual support. Children and young people played one of three roles – the ‘engineer’ (gives instructions), the ‘supplier’ (finds the pieces) or the ‘builder’ (builds the model) – and worked together.

Questionnaires completed by children and young people, their parents/guardians and teachers were used to look at the intervention’s effects. The main objective was to see if there was a change in social skills measured by a teacher-completed questionnaire.

Results showed that the social skills of children and young people in the LEGO® based therapy groups did improve a little. We found that the intervention is not very costly for schools to run. Many parents/guardians and teachers thought that the intervention was beneficial and that the children and young people enjoyed it.

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