## # 25 Invited Presenter

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## **Developing Reading Skills in Mainstream Education**

Chair: R. Douglas Greer (Columbia University Teachers College and Graduate School of Arts and Sciences) JULIAN C. LESLIE (Ulster University)



Julian Leslie obtained his doctorate from Oxford University in 1974 since when he has been in academic posts in Northern Ireland. He published behaviour analysis textbooks in 1979, 1996, 2000, 2002 (the 1996 volume was reprinted until 2008 and remains in print, and the 2002 text also remains in print). As well as teaching undergraduate and postgraduate courses, he has successfully supervised 48 PhD students in fields including, experimental analysis of behaviour, applied behaviour analysis, psychopharmacology, behavioural neuroscience, experimental psychology, applied psychology. Three recent PhDs are concerned with behavioural strategies to address environmental issues. In 1977 he was co-founder of the group, Behaviour Analysis in Ireland which is a chapter of ABAI. In 2004, the group became the Division of Behaviour Analysis of the Psychological Society of Ireland, and he is currently the Division chair. Julian Leslie organised the Third European Meeting for the Experimental

Analysis of Behaviour in Dublin, Ireland 1999, and has co-organised 11 annual conferences of the Division of Behaviour Analysis from 2007 to 2017, variously in Dublin, Galway and Athlone. He was a keynote speaker at the European Association for Behaviour Analysis in Milan in 2006, and in Crete, Greece in 2010, and also a keynote speaker on behavioural strategies to address environmental issues at the Brazilian Association for Behaviour Analysis, Salvador 2011. From 1984 to 1994 Julian Leslie was head of the Psychology Department, and from 2008 to 2015 head of the Research Graduate School, Faculty of Life & Health Sciences, Ulster University. In 2014, Julian Leslie was awarded a Doctorate of Science by Ulster University for career research on the experimental analysis of behaviour. From 2014 he has given a series of papers on behavioural accounts of consciousness, including an invited address at BABAT 2017. Much current research involves developing skills of children in the classroom.

Abstract: Many countries, including the US, the UK and within that Northern Ireland, face continuing problems in developing literacy and reading skills in primary education with substantial numbers of children missing national literacy targets. Behaviour analysis of human development focusses on the need to specify key skills that comprise any higherorder activity and then train them explicitly in a program that is individualised for every child. In the case of reading, there is widespread agreement that key skills are phonemic awareness, use of phonics, fluency, guided oral reading, and acquisition of new vocabulary words. The Headsprout Early Reading<sup>©</sup> program, developed by behaviour analysts, is an online package which targets each of the skills through intensive systematic phonics training. It thus makes use of computer-based instruction which, when used effectively, promotes higher levels of student engagement and enjoyment. A number of published studies of use of Headsprout<sup>©</sup> have shown efficacy and efficiency in increasing the reading skills of individuals with autism and with typically developing learners within the classroom and home based settings. We have carried out several studies within mainstream schools in Northern Ireland using Headsprout® to improve the reading skills of child at risk of failing to achieve literacy targets and have obtained encouraging results. The next stage is to achieve school district-wide implementation of this type of intervention. This requires us to meet many challenges in sustaining behaviour-based interventions in schools. Some of these will be outlined, and it will be suggested that, to improve our progress in this important task, we can draw on the huge literature on how to make interventions for autism effective and sustained.