

Baby buggies may undermine child development

21 November 2008

First ever study on the psychological effects of buggies reveals life in a 21st century baby buggy can be emotionally isolated and language-poor, which carries implications for children's brain development.

The most popular style of baby buggies – those that face away from the pusher – may be undermining children's development. Children in such buggies are significantly less likely to talk, laugh, and interact with their parents, than are those in buggies that face the pusher, according to the first ever research study on the psychological effects of buggies on babies. It is published today by Talk To Your Baby, the early language campaign of the National Literacy Trust, an independent charity that aims to change lives through literacy. It was funded by the Sutton Trust.

An observational study of 2,722 parent-infant pairs across the country was carried out for the Talk To Your Baby early language campaign by Dr Suzanne Zeedyk, Developmental Psychologist at Dundee University's School of Psychology.

Dr Zeedyk also carried out a smaller experimental study of 20 babies being wheeled in pushchairs across a one mile stretch in the centre of Dundee. Half the journey was spent in an away-facing buggy and half in a toward-facing buggy. The results of this pilot work, the first of its kind, suggest that parents talk less to children in away-facing buggies and babies' sleeping patterns and heart rates differ slightly for the two orientations, suggesting it is possible that they are more stressed by away-facing buggies.

Key findings of both research projects include:

- 62% of all children observed were travelling in away-facing buggies, with the rate even higher, at 86%, between the ages of 1 and 2 years
- Parents using face-to-face buggies were twice as likely to be talking to their baby (25% compared with 11%)
- Less than a quarter of parents observed were speaking to their child (22%)
- Mothers and infants, who had a chance in the experimental study to travel in both types of buggies, also laughed more frequently with face-to-face buggies. Only one baby in the group of 20 studied laughed during the away-facing journey, while half laughed during the face-to-face journey
- Babies' average heart rates fell slightly when placed in a toward-facing buggy, and babies were also twice as likely to fall asleep in this orientation, both of which could be taken as possible indicators of reduced stress levels

Dr Zeedyk said: "Even as a developmental psychologist, this was not an issue I had previously thought about, and I was surprised to find that no other scientists had studied it either. Neuroscience has helped us to learn how important social interaction during the early years is for children's brain development. If babies are spending significant amounts of time in a baby buggy that undermines their ability to communicate easily with their parent, at an age when the brain is developing more than it will ever again in life; then this has to impact negatively on their development.

"Our experimental study showed that, simply by turning the buggy around, parents' rate of talking to their baby doubled. I had also not anticipated that such a high percentage of babies in face-to-face buggies would be sleeping – 52%, against only

27% in away facing buggies. It was a complete surprise. This is significant as you are more likely to sleep when you are feeling relaxed and safe.

"Our data suggests that for many babies today, life in a buggy is emotionally impoverished and possibly stressful. Stressed babies grow into anxious adults. It looks, from our results, that it is time that we began carrying out larger scale research on this issue. Parents deserve to be able to make informed choices as to how to best promote their children's emotional, physical, and neurological development."

Liz Attenborough, Manager of the Talk To Your Baby campaign, said: "Talk To Your Baby is campaigning for manufacturers to make sociable, face-to-face buggies for toddlers more affordable and to increase parental awareness of the importance of talking to their baby. This research shows that something as seemingly ordinary as going out with a child in a buggy where adult and child are face-to-face can be a valuable opportunity to spend time talking together in a way that is stress-free for the child. Parents with a two-way facing buggy should use the sociable face-to-face option as standard."

Laura Barbour, Sutton Trust, commented, "The Sutton Trust hopes that buggy manufacturers will look closely at this research, which suggests that face-to-face models improve communication at a very early stage. The problem is that at present these cost a minimum of £200 and are therefore too expensive for many families. The Sutton Trust, which campaigns for improved social mobility, would like to see options available in every price range so that all parents can have greater choice."

ends.

Notes to editors

About Dr Zeedyk

Dr Suzanne Zeedyk is a Senior Lecturer at Dundee University. Suzanne has spent the past 15 years researching parent-child interactions, with the aim of revealing just how sophisticated infants' communication skills are, even from the earliest months of life.

Suzanne has taken an active role in parenting programmes in Dundee, helping to evaluate their effectiveness and to disseminate those findings at a national level. She was recently awarded a prestigious British Academy Research Development Award that will allow her to complete her forthcoming book, and also a Public Engagement Grant from the British Psychological Society that will allow her to make a film which seeks to help parents and others to recognise just how much infants thrive when their world is rich in other people's attention.

About the research

The report, ***What's life in a baby buggy like?: The impact of buggy orientation on parent-infant interaction and infant stress***, is a research study carried out by Dr. M. Suzanne Zeedyk in collaboration with the National Literacy Trust. The research was supported by a grant from the Sutton Trust.

The project was comprised of two studies. The first was a national observational survey, conducted on High Streets in 54 locations throughout the UK and eventually comprising 2722 observations of parent-child pairs, which systematically documented the social interactions of families occurring during buggy use. The second was a small-scale experimental study with 20 mother-infant pairs, which built on the findings of Study I by monitoring both mother-infant interactions and indicators of infant stress, during journeys in the two buggy orientations.

[Read the report](#)

The buggies in Study II were kindly donated by Hauck Group and Chicco.

About the National Literacy Trust

The National Literacy Trust is an independent charity that changes lives through literacy. It has a vision of a society in which everyone has the reading, writing, speaking and listening skills that they need to fulfil their own and, ultimately, the nation's potential. It links home, school and the wider community to inspire learners and create opportunities for everyone.

www.literacytrust.org.uk

The National Literacy Trust is a registered charity in England and Wales, no. 1116260, and a company limited by guarantee, no. 5836486, Registered office: 68 South Lambeth Road, London SW8 1RL.

About Talk to Your Baby

Talk To Your Baby is a campaign run by the National Literacy Trust to encourage parents and carers to talk more to children from birth to three. Talking to young children helps them become good communicators, which is essential if they are to do well at school and lead happy, fulfilled and successful lives. www.talktoyourbaby.org.uk

Talk To Your Baby has been working to raise awareness of issues surrounding baby buggies for a number of years. In 2005, over 1,000 people took part in a Talk To Your Baby online buggy survey, which ran from May to December and the overwhelming majority were in favour of pusher-facing buggies. [More information on TTYB's buggy campaign](#)

About the 2008 National Year of Reading

The 2008 National Year of Reading is a year-long celebration of reading, in all its forms. It will help to build a greater national passion for reading – for children, families and adult learners alike. The Year will encourage people to read in businesses, homes, and communities around the country, providing new opportunities to read and helping people to access help and support through schools and libraries. The 2008 National Year of Reading is being managed by the National Literacy Trust and lead partner The Reading Agency.

www.yearofreading.org.uk