

Training Mothers Improves Children's Memory

20 July 2007 Press Release: University of Otago

Training Mothers Improves Children's Memory and Narrative Skills

Pre-schoolers' memory and language skills can be significantly improved if their mothers talk to them in richer ways about past events, according to University of Otago research published today.

Associate Professor Elaine Reese of the University's Department of Psychology, says the study's findings have important implications for efforts to ensure that children are well-prepared to learn once they reach school.

The study, which appears in the US journal *Child Development*, found that "training" mothers to talk more elaborately helped their children's memory and narrative development by age 3.5.

Associate Professor Reese and then PhD student Rhiannon Newcombe carried out a year-long intervention study with 115 Dunedin mothers and their 1.5 to 3.5 year old children.

Half the mothers were trained in an elaborative questioning technique to use when discussing memories with their toddlers.

"For instance, mothers were prompted to ask more open-ended questions containing new information about events and to confirm their children's responses and focus on what the child had found most interesting," Dr Reese says.

At the outset, the researchers assessed all the mothers' natural style of talking about the past and their children's language skills and level of self awareness.

The children's memory was tested at 2.5 and 3.5 years in conversations about the past with their Mothers and with researchers.

"We found that children of trained mothers remembered more details and told more complex stories about the past when conversing with their mothers than children of untrained mothers," she says.

"These findings are important because children's language skills in the preschool years are a very good predictor of their early reading skill and their success in school."

Parent-child conversations are vital in children's developing memory and narrative abilities, but children's cognitive level is also important when considering the benefits of adult conversation.

"The effects of maternal training were strongest for children who had more advanced levels of self awareness at the start of the study. These children provided the most accurate memories and detailed narratives with a researcher at age 3.5.

"We know from other research that children with richer stores of autobiographical memories have a more coherent self concept. We also know that children with better narrative skills do better at school.

"The study began in 1999 when the children were one year olds. In 2008, we hope to follow up with the children at age 10 to determine whether the training has lasting effects on the children's language, reading, memory skills, and self concept."

These findings have implications for interventions aimed at enriching children's memory and narrative skills before they enter formal schooling, she says.

"An important feature of the training was that it worked equally well with less and more educated mothers to boost their speech rates with their young children."

The research was supported by the Marsden Fund of New Zealand and a University Division of Sciences grant.

It is the supreme art of the teacher to awaken joy in creative expression and knowledge.

- Albert Einstein
(1879 - 1955)

