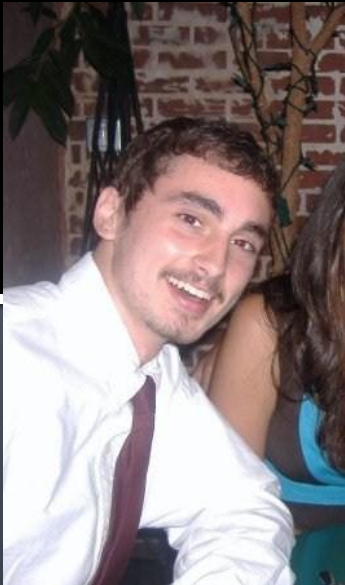


Children's Memory for a Dental Operative Procedure: The Impact of Stress and Coping on Remembering



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Background

- Over the course of the last 30 years, basic research on the development of memory came to be very important in legal settings in which children were asked to testify about allegations of child abuse.
- Numerous studies have attempted to capture children's memory for a stressful or traumatic experience (e.g., emergency room visits or urinary catheterization-procedures, see e.g., Merritt, Ornstein, & Spicker, 1994; Peterson & Bell, 1996).
- Our current study was designed to examine children's memory of stressful dental operative procedures (fillings, crowns, and extractions.) These three treatments differed slightly in terms of what occurred during the procedure and were hypothesized to induce varying levels of stress.
- Multiple stress measures, including Frankl and BPRS scores, in addition to information regarding child temperament, family demographics, and prior dental knowledge were gathered.

Results

- 32 participants (ages 4-11) have been interviewed following stressful dental operative procedures
- Initial analyses have revealed significant differences in children's total percentage recall of the features within the procedure, as a function of type of treatment the children experienced, $F(2,19) = 3.43$, $p < .05$. The participants in the extraction group, which were thought to experience the most stressful procedure, had the highest average recall of present event features compared to the other two treatment groups.
- Although single value measures have been extensively used in past research, our current results indicate the Frankl and BPRS scores obtained by the researchers can only provide a limited way of examining stressful behavior as a factor affecting children's memory for an event.
- In our study, we are exploring a novel approach of measuring stress repeatedly as the dental procedure unfolds, which we hypothesize will enable us to examine more precisely the linkage between changing levels of stress and children's memory.