



## Brief Report: A “Storybook” Ending to Children’s Bedtime Problems – The Use Of a Rewarding Social Story to Reduce Bedtime Resistance and Frequent Night Waking

### Article summarized

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### Introduction

A recent study by Frank, Issa, and Stryker (2001) has linked positive sleep behavior to early cognitive brain development.<sup>1</sup> Up to 25% of all children between the ages of 1 and 5 experience some form of bedtime difficulty significant enough for a caregiver to seek clinical intervention<sup>2</sup>. While the common pharmacological and extinction therapies have proven effective treatments, many caregivers have expressed concerns with these methods and their reluctance to follow the strict procedures threatens the intervention’s effectiveness. As an alternative, this study explored the link between a *Social Story* about positive bedtime behavior and a small tangible reward in reducing *disruptive bedtime behavior (DBB)*, *night waking (NW)*, and problem behavior during waking hours. The researchers also suggested that this treatment plan would be a highly acceptable intervention for caregivers to administer.

### Participants

Through strict selection criteria, researchers were able to pull 5 participants from a Midwest sleep clinic. These participants had to be between the age of 2 and 7 years of age with a minimum of 3 occurrences of *DBB* over a 4 week span where no other medical issues could be contributing. Of the original 5 selected participants, only 4 completed the study.

### Procedure

Using a single-subject design, the authors first obtained baseline readings for each of the participants. Then the caregivers received a copy of *The Sleep Fairy*<sup>3</sup> to read at the conclusion of the child’s nighttime routine until the child demonstrated successful behavior for 2 weeks. Embedded in this story, and reinforced by an introductory section for the caregivers, are specific expectations for bedtime behavior and a plan for an appropriate reward, often a prize or treat. Through *Sleep Diaries*, caregivers carefully recorded the total number of observed *DBB* and *NW*’s.

### Results

Researchers immediately noticed significant decreases in *DBB* and *NW*’s. One subject’s target behavior was a reduction in *DBB*’s, which went from approximately 20 a night to 1 during the introduction phase climbing back to around 4 a night by the three month follow-up. Another caregiver who chose to target *NW*’s with their child had similar improvements, from 2.4 events during baseline to .5 events during treatments and finally 0 events at the three month follow-up. While all 4 participants scored in the *clinical* range of daytime problem behavior pretreatment, 3 showed improvement during post-testing. Of those, 2 moved into the *normal* range.

While this study had only a limited number of participants, when compared to empirically accepted treatment options, *The Sleep Fairy* scored much higher on caregiver acceptability and caregivers noted no adverse effects associated with its implementation. Given its easy process, limited risk, and accessible format, this intervention could be put into public use with minimal cost while providing another potent tool for pediatric sleep disturbance.

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<sup>1</sup> Frank, M. G., Issa, N. P., & Stryker, M. P. (2001). **Sleep Enhances Plasticity in the Developing Visual Cortex.** *Neuro, 30*, 275-287.

<sup>2</sup> Armstrong, K. L., Quinn, R. A.M & Dadds, M. R. (1994). **The Sleep Patterns of Normal Children.** *Medical Journal of Australia, 161*, 202-206.

<sup>3</sup> Peterson, J. L., & Peterson, M. (2003). **The Sleep Fairy.** Omaha, NE: Behave’n Kids Press.