

Are Social Stories an Effective Intervention for Children with Communication and Behaviour Difficulties?

Who conducted this research?
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Why evaluate Social Stories for children with pragmatic language and behaviour difficulties?

The relationship between speech, language and communication needs (SLCN) and behavioural difficulties is well-documented in the literature. Children with specific SLCN demonstrate higher than expected levels of behavioural difficulties on standard questionnaires (Lindsay, Dockrell & Strand, 2007), while pupils at risk of exclusion and juvenile offenders display a high proportion of speech and language difficulties (Bryan, Freer & Furlong, 2009; Clegg et al., 2009; Gregory & Bryan, 2011).

Pragmatic language has been identified as a mediator of the relationship between behaviour and language (Law, Rush & McBean, 2014). This is the language of social interactions and includes comprehension of verbal messages, coherence, conversational style and content of contributions (Adams & Bishop, 1989).

What was the focus?

Hypothesis

The use of a Social Story intervention leads to reductions of problematic behaviour for children with behaviour and pragmatic language difficulties.

Additional exploratory research questions investigated generalisation and maintenance, as well as intervention fidelity and social validity.

| Phase 1 | Phase 2 | Phase 3 |
|--|---|--|
| Baseline | Intervention | Follow-up |
| No intervention | Social Story read with child | No intervention |
| 2-3 weeks – observation 3 times per week 6-9 data points | 3 weeks – intervention & observation 3 times per week 9 data points | 4 weeks – observation 1 times per week 4 data points |

What was found?

The Social Story intervention led to positive change across all 4 participants, with a medium size effect for two participants and a weak effect for two participants.

- **Generalisation:** Findings were inconclusive although two participants demonstrated improvements in problem behaviours according to parent- and teacher-report.
- **Maintenance:** There was a weak effect for three participants and a strong effect for the fourth. Tau-U indicated a non-significant change from intervention to follow-up phase, suggesting a level of maintenance.
- High levels of **intervention fidelity** & **social validity** were reported.

Why Social Stories?

Interventions for children with pragmatic language needs are starting to emerge and Social Stories have been indicated as a potentially relevant approach (Law et al., 2012). Social Stories have a limited but promising evidence base for children with autism (Sansosti et al., 2004). Research with other populations has been done, but more rigorously designed studies are needed (Toplis & Hadwin, 2006).

What was done?

Design & measures

- ❖ A single-case non-concurrent multiple baseline across participants experimental design (Barlow, Nock & Hersen, 2009) was employed.
- ❖ 15-minute observations using a 10-second partial interval recording strategy were undertaken three times per week.
- ❖ Questionnaires explored generalisation, social validity and intervention fidelity.
- ❖ Data was analysed visually and Non-overlap of All Pairs (NAP; Parker & Vannest, 2009) and Tau-U (Parker, Vannest, Davis, & Sauber, 2011) calculated.

Participants

Four participants in Key Stage 2 who had a special educational need primarily for behaviour were recruited across two primary schools. A checklist (CCC-2; Bishop, 2003) was completed to identify pragmatic language difficulties.

Intervention

A Social Story was constructed jointly by the researcher and the member of school staff delivering the intervention according to Gray's (2000; 2010) guidance. The intervention was delivered by a school LSA or teacher, with training provided and fidelity monitored by the researcher.

Implications for EP practice

1. Social Stories could be considered as an intervention for children with pragmatic language and behaviour difficulties, taking into consideration their acceptability and relatively low cost.
2. Taking into account the recommendations of Russell, Webster and Blatchford (2012) on the effective deployment of LSAs, EPs can play a role in providing training to support LSAs to deliver targeted interventions, as well as ongoing support with monitoring fidelity and outcomes.

Adams, C., & Bishop, D. V. (1989). Conversational characteristics of children with semantic-pragmatic disorder. I: Exchange structure, turntaking, repairs and cohesion. *British Journal of Disorders of Communication*, 24(3), 211-239. / Barlow, D. H., Nock, M., & Hersen, M. (2009). Single case experimental designs: Strategies for studying behavior change. Boston: Pearson. / Bishop, D. V. M. (2003). *The Children's Communication Checklist-2* (London: Psychological Corporation). / Bryan, K., Freer, J., & Furlong, C. (2007). Language and communication difficulties in juvenile offenders. *International Journal of Language & Communication Disorders*, 42(5), 505-520. / Clegg, J., Stackhouse, J., Finch, K., Murphy, C., & Nicholas, S. (2009). Language abilities of secondary age pupils at risk of school exclusion: A preliminary report. *Child Language Teaching and Therapy*, 25(1), 123-139. / Gray, C. (2000). *Writing Social Stories with Carol Gray*. Arlington, TX: Future Horizons. / Gray, C. (2010). *The new Social Story book*. Arlington, TX: Future Horizons. / Gregory, J., & Bryan, K. (2011). Speech and language therapy intervention with a group of persistent and prolific young offenders in a non-custodial setting with previously undiagnosed speech, language and communication difficulties. *International Journal of Language & Communication Disorders*, 46(2), 202-215. / Law, J., Lee, W., Roulstone, S., Wren, Y., Zeng, B., & Lindsay, G. (2012). 'What Works': interventions for children and young people with speech, language and communication needs. London: DfE. / Law, J., Rush, R., & McBean, K. (2014). The relative roles played by structural and pragmatic language skills in relation to behaviour in a population of primary school children from socially disadvantaged backgrounds. *Emotional and Behavioural Difficulties*, 19 (1), 28-40. / Lindsay, G., Dockrell, J. E., & Strand, S. (2007). Linguistic patterns of behaviour problems in children with specific speech and language difficulties: Child and contextual factors. *British Journal of Educational Psychology*, 77(6), 811-828. / Parker, R. I., & Vannest, K. (2009). An improved effect size for single-case research: Nonoverlap of all-pairs. *Behavior Therapy*, 46(4), 357-367. / Parker, R. I., Vannest, K. J., & Davis, J. L. (2011). Effect size in single-case research: A review of nine nonoverlap techniques. *Behavior Modification*, 35(4), 303-322. / Russell, A., Webster, R., & Blatchford, P. (2012). *Maximising the impact of teaching assistants: Guidance for school leaders and teachers*. London: Routledge. / Sansosti, F. J., Powell-Smith, K. A., & Kiriakid, D. (2004). A research synthesis of Social Story interventions for children with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 19(4), 194-204. / Toplis, R., & Hadwin, J. A. (2006). Using Social Stories to change problematic lunchtime behaviour in school. *Educational Psychology in Practice*, 22(1), 53-67.