

Time Delay Fact Sheet

Brief Description

Time delay (TD) is a practice used to systematically fade the use of prompts during instructional activities. With this procedure, a brief delay is provided between the initial instruction and any additional instructions or prompts. The evidence-based research focuses on two types of time delay procedures: progressive and constant. With *progressive time delay*, the adult gradually increases the waiting time between an instruction and any prompts that might be used to elicit a response from a learner with ASD. For example, a teacher provides a prompt immediately after an instruction when a learner with ASD is initially learning a skill. As the learner becomes more proficient at using the skill, the teacher gradually increases the waiting time between the instruction and the prompt. In *constant time delay*, a fixed amount of time is always used between the instruction and the prompt as the learner becomes more proficient at using the new skill. Time delay is always used in conjunction with a prompting procedure (e.g., least-to-most prompting, simultaneous prompting, graduated guidance).

Qualifying Evidence

TD meets evidence-based criteria with 12 single case design studies.

Ages

According to the evidence-based studies, this intervention has been effective for preschoolers (3-5 years) to young adults (19-22 years) with ASD.

Outcomes

TD can be used effectively to address social, communication, behavior, joint attention, play, cognitive, school-readiness, academic, motor, and adaptive skills.

Research Studies Providing Evidence

Collins, B. C., Hager, K. L., & Creech Galloway, C. (2011). Addition of functional content during core content instruction with students with moderate disabilities. *Education and Training in Autism and Developmental Disabilities, 46*(1), 22-39.

Ingenmey, R., & Houten, R. (1991). Using time delay to promote spontaneous speech in an autistic child. *Journal of Applied Behavior Analysis, 24*(3), 591-596. doi: 10.1901/jaba.1991.24-591

Ingvarsson, E. T., & Hollobaugh, T. (2010). Acquisition of intraverbal behavior: Teaching children with autism to mand for answers to questions. *Journal of Applied Behavior Analysis, 43*(1), 1-17. doi: 10.1901/jaba.2010.43-1

- Leung, J. P. (1994). Teaching spontaneous requests to children with autism using a time delay procedure with multi-component toys. *Journal of Behavioral Education, 4*(1), 21-31. doi: 10.1007/BF01560506
- Leung, J. P., & Chan, O. T. (1993). Teaching spontaneous verbal requests to Chinese children with autism using a time delay procedure. *Bulletin of the Hong Kong Psychological Society.*
- Liber, D. B., Frea, W. D., & Symon, J. B. (2008). Using time-delay to improve social play skills with peers for children with autism. *Journal of Autism and Developmental Disorders, 38*(2), 312-323. doi: 10.1007/s10803-007-0395-z
- Matson, J. L., Sevin, J. A., Fridley, D., & Love, S. R. (1990). Increasing spontaneous language in three autistic children. *Journal of Applied Behavior Analysis, 23*(2), 227-233. doi: 10.1901/jaba.1990.23-227
- Miller, C., Collins, B. C., & Hemmeter, M. L. (2002). Using a naturalistic time delay procedure to teach nonverbal adolescents with moderate-to-severe mental disabilities to initiate manual signs. *Journal of Developmental and Physical Disabilities, 14*(3), 247-261. doi: 10.1023/A:1016072321661
- Reichow, B., & Wolery, M. (2011). Comparison of progressive prompt delay with and without instructive feedback. *Journal of Applied Behavior Analysis, 44*(2), 327-340. doi: 10.1901/jaba.2011.44-327
- Rogers, L., Hemmeter, M. L., & Wolery, M. (2010). Using a constant time delay procedure to teach foundational swimming skills to children with autism. *Topics in Early Childhood Special Education, 30*(2), 102-111. doi: 10.1177/0271121410369708
- Taylor, B. A., & Harris, S. L. (1995). Teaching children with autism to seek information acquisition of novel information and generalization of responding. *Journal of Applied Behavior Analysis, 28*(1), 3-14. doi: 10.1901/jaba.1995.28-3
- Venn, M. L., Wolery, M., Werts, M. G., Morris, A., DeCesare, L. D., & Cuffs, M. S. (1993). Embedding instruction in art activities to teach preschoolers with disabilities to imitate their peers. *Early Childhood Research Quarterly, 8*(3), 277-294. doi: 10.1016/S0885-2006(05)80068-7

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