



---Evidence-base for Functional Communication Training---

The National Professional Development Center on ASD has adopted the following criteria to determine if a practice is evidence-based. The EBP Report provides more information about the review process (Wong et al., 2014).

Efficacy must be established through high quality, peer-reviewed research in scientific journals using:

- randomized or quasi-experimental design studies (two high quality experimental or quasi-experimental group design studies),
- single-subject design studies (three different investigators or research groups must have conducted five high quality single subject design studies), or
- combination of evidence [one high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies)].

--OVERVIEW--

Functional communication training addresses interfering behaviors by systematically identifying the function of the behavior and providing a replacement behavior in the form of appropriate communication. Functional communication training meets the evidence-based practice criteria with 12 single case design studies. The practice has been effective with learners in preschool (3-5 years) to high school learners (15-22 years). Studies included in the 2014 EBP report detailed how functional communication training can be used effectively to address: social, communication, school readiness, play, adaptive, and behavior outcomes.

In the table below, the outcomes identified by the evidence base are shown by age of participants.

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
No studies	Social	Social		
	Communication	Communication	Communication	Communication
	Behavior	Behavior	Behavior	Behavior
	School-Readiness	School-Readiness		
	Play	Play		
	Adaptive	Adaptive		Adaptive

Early intervention (0-2 years)

No studies

Preschool (3-5 years)

*Brown, K. A., Wacker, D. P., Derby, K. M., Peck, S. M., Richman, D. M., Sasso, G. M., ... & Harding, J. W. (2000). Evaluating the effects of functional communication training in the presence and absence of establishing operations. *Journal of Applied Behavior Analysis, 33*(1), 53-71. doi: 10.1901/jaba.2000.33-53

Falcomata, T. S., Roane, H. S., Feeney, B. J., & Stephenson, K. M. (2010). Assessment and treatment of elopement maintained by access to stereotypy. *Journal of Applied Behavior Analysis, 43*(3), 513-517. doi: 10.1901/jaba.2010.43-513

Gibson, J. L., Pennington, R. C., Stenhoff, D. M., & Hopper, J. S. (2010). Using desktop videoconferencing to deliver interventions to a preschool student with autism. *Topics in Early Childhood Special Education, 29*(4), 214-225. doi: 10.1177/0271121409352873

Mancil, G. R., Conroy, M. A., Nakao, T., & Alter, P. J. (2006). Functional communication training in the natural environment: A pilot investigation with a young child with autism spectrum disorder. *Education and Treatment of Children, 29*(4), 615-633.

Olive, M. L., Lang, R. B., & Davis, T. N. (2008). An analysis of the effects of functional communication and a voice output communication aid for a child with autism spectrum disorder. *Research in Autism Spectrum Disorders, 2*(2), 223-236. doi: 10.1016/j.rasd.2007.06.002


Schindler, H. R., & Horner, R. H. (2005). Generalized reduction of problem behavior of young children with autism: Building trans-situational interventions. *American Journal on Mental Retardation, 110*(1), 36-47.

*Volkert, V. M., Lerman, D. C., Call, N. A., & Trosclair-Lasserre, N. (2009). An evaluation of resurgence during treatment with functional communication training. *Journal of Applied Behavior Analysis, 42*(1), 145-160. doi: 10.1901/jaba.2009.42-145

Elementary (6-11 years)

*Brown, K. A., Wacker, D. P., Derby, K. M., Peck, S. M., Richman, D. M., Sasso, G. M., ... & Harding, J. W. (2000). Evaluating the effects of functional communication training in the presence and absence of establishing operations. *Journal of Applied Behavior Analysis, 33*(1), 53-71. doi: 10.1901/jaba.2000.33-53

Buckley, S. D., & Newchok, D. K. (2005). Differential impact of response effort within a response chain on use of mands in a student with autism. *Research in Developmental Disabilities: A Multidisciplinary Journal, 26*(1), 77-85. doi: 10.1016/j.ridd.2004.07.004



Functional Communication Training (FCT)

Elementary (6-11 years continued)

Casey, S. D., & Mercial, C. L. (2006). The use of functional communication training without additional treatment procedures in an inclusive school setting. *Behavioral Disorders, 32*(1), 46-54.

Fisher, W. W., Kuhn, D. E., & Thompson, R. H. (1998). Establishing discriminative control of responding using functional and alternative reinforcers during functional communication training. *Journal of Applied Behavior Analysis, 31*(4), 543-560. doi: 10.1901/jaba.1998.31-543

*Volkert, V. M., Lerman, D. C., Call, N. A., & Trosclair-Lasserre, N. (2009). An evaluation of resurgence during treatment with functional communication training. *Journal of Applied Behavior Analysis, 42*(1), 145-160. doi: 10.1901/jaba.2009.42-145

Middle (12-14 years)

*Brown, K. A., Wacker, D. P., Derby, K. M., Peck, S. M., Richman, D. M., Sasso, G. M., ... & Harding, J. W. (2000). Evaluating the effects of functional communication training in the presence and absence of establishing operations. *Journal of Applied Behavior Analysis, 33*(1), 53-71. doi: 10.1901/jaba.2000.33-53

*Tiger, J. H., Fisher, W. W., Toussaint, K. A., & Kodak, T. (2009). Progressing from initially ambiguous functional analyses: Three case examples. *Research in developmental disabilities, 30*(5), 910-926. doi: 10.1016/j.ridd.2009.01.005

High (15-22 years)

Kuhn, D. E., Hardesty, S. L., & Sweeney, N. M. (2009). Assessment and treatment of excessive straightening and destructive behavior in an adolescent diagnosed with autism. *Journal of Applied Behavior Analysis, 42*(2), 355-360. doi: 10.1901/jaba.2009.42-355

*Tiger, J. H., Fisher, W. W., Toussaint, K. A., & Kodak, T. (2009). Progressing from initially ambiguous functional analyses: Three case examples. *Research in developmental disabilities, 30*(5), 910-926. doi: 10.1016/j.ridd.2009.01.005

* Research which included participants in multiple age ranges.