



Rinforzo (R+)

AFIRM

---L'Evidenze di ricerca del Rinforzo---

Il [National Professional Development Center \(NPDC\) on Autism Spectrum Disorder](#) ha adottato i seguenti criteri per determinare se una pratica sia evidence-based. (cioè basata sulle 'evidenze d ricerca). Il report sulle PBE fornisce maggiori informazioni riguardo al processo con cui sono state esaminate le diverse ricerche prese in esame (Wong et al., 2014).

L'efficacia deve essere stabilita prendendo in considerazione ricerche di alta qualità pubblicate su giornali scientifici, che hanno superato una revisione fra pari che facciano ricorso a :

- Studi randomizzati o quasi-sperimentali (due studi sperimentali ad alta qualità o studi quasi sperimentali)
- Studi su caso singolo (tre diversi esaminatori o i gruppi di ricerca devono avere condotto 5 studi su caso singolo di alta qualità).
- Combinazione di differenti evidenze scientifiche [(una ricerca ad alta qualità con gruppo randomizzato o quasi sperimentale e tre studi ad alta qualità su caso singolo condotti da almeno tre diversi esaminatori o da gruppi di ricerca differenti (sia negli studi che coinvolgono gruppi di soggetti che su casi singoli)].

RASSEGNA

Il rinforzo è una pratica di base utilizzata per insegnare le abilità target e aumentare il comportamento desiderato. Il rinforzo incontra la pratica basata sull'evidenza con 43 studi di ricerca su caso singolo. Questa pratica si rivela efficace con alunni da età precoce (0-2 anni) fino a alunni delle scuole superiori (15-22 anni). Le Pratiche basate sull'Evidenza (PBE) e gli studi contenuti nel [2014 EBP report](#) illustrano in dettaglio come l'intervento basato sull' antecedente possa essere usato in modo efficace nel lavoro in diverse aree: sociale, comunicazione, comportamentale, prerequisiti all'apprendimento scolastico, motoria, adattiva, vocale e risultati scolastici.

Rinforzo (R+)

Nella tabella qui sotto , sono riportate le aree su cui poter ottenere risultati positivi tramite l'impiego delle R+ in base all'età dei soggetti.

INTERVENTI PRECOCI (0-2)	SCUOLA DELL'INFANZIA (3-5)	SCUOLA PRIMARIA (6-11)	SCUOLA SECONDARIA DI I GRADO (12-14)	SCUOLA SECONDARIA DI SECONDO GRADO (15-22)
	Abilità Sociali	Abilità Sociali	Abilità Sociali	Abilità Sociali
Comunicazione	Comunicazione	Comunicazione	Comunicazione	Comunicazione
Attenzione congiunta	Attenzione congiunta			Attenzione congiunta
	Comportamento	Comportamento	Comportamento	Comportamento
	Prerequisiti all'apprendimento scolastico	Prerequisiti all'apprendimento scolastico		
	Gioco	Gioco		Gioco
		Cognitivo		
	Abilità motorie			
	Comportamento Adattivo	Comportamento Adattivo	Comportamento Adattivo	Comportamento adattivo
	Motorio		Apprendimenti occupazionali	Apprendimenti occupazionali
		Accademico		

Interventi precoci (0-2 anni)

Esch, B. E., Carr, J. E., & Grow, L. L. (2009). Evaluation of an enhanced stimulus-stimulus pairing procedure to increase early vocalizations of children with autism. Journal of Applied Behavior Analysis, 42(2), 225-241. doi: 10.1901/jaba.2009.42-225

Young, J. M., Krantz, P. J., McClannahan, L. E., & Poulson, C. L. (1994). Generalized imitation and response-class formation in children with autism. Journal of Applied Behavior Analysis, 27(4), 685-697. doi: 10.1901/jaba.1994.27 685

Scuola dell'infanzia (3-5 anni)

Esch, B. E., Carr, J. E., & Grow, L. L. (2009). Evaluation of an enhanced stimulus-stimulus pairing procedure to increase early vocalizations of children with autism. Journal of Applied Behavior Analysis, 42(2), 225-241. doi: 10.1901/jaba.2009.42-225

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LeBlanc, L. A., Carr, J. E., Crossett, S. E., Bennett, C. M., & Detweiler, D. D. (2005). Intensive outpatient behavioral treatment of primary urinary incontinence of children with autism. *Focus on Autism and Other Developmental Disabilities*, 20(2), 98-105. doi:10.1177/10883576050200020601

*Lee, R., & Sturmey, P. (2006). The effects of lag schedules and preferred materials on variable responding in students with autism. *Journal of Autism and Developmental Disorders*, 36(3), 421-428. doi: 10.1007/s10803-006-0080-

*Levin, L., & Carr, E. G. (2001). Food selectivity and problem behavior in children with developmental disabilities analysis and intervention. *Behavior Modification*, 25(3), 443-470. doi: 10.1177/0145445501253004

Normand, M. P., & Beaulieu, L. (2011). Further evaluation of response-independent delivery of preferred stimuli and child compliance. *Journal of Applied Behavior Analysis*, 44(3), 665-669. doi: 10.1901/jaba.2011.44-665

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Reichle, J., Johnson, L., Monn, E., & Harris, M. (2010). Task engagement and escape maintained challenging behavior: differential effects of general and explicit cues when implementing a signaled delay in the delivery of reinforcement. *Journal of Autism and Developmental Disorders*, 40(6), 709-720. doi: 10.1007/s10803-010-0946-6

*Sidener, T. M., Shabani, D. B., Carr, J. E., & Roland, J. P. (2006). An evaluation of strategies to maintain mands at practical levels. *Research in Developmental Disabilities*, 27(6), 632-644. doi: 10.1016/j.ridd.2005.08.002

Tarbox, R. S., Ghezzi, P. M., & Wilson, G. (2006). The effects of token reinforcement on attending in a young child with autism. *Behavioral Interventions*, 21(3), 155-164. doi: 10.1002/bin.213

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*Carter, C. M. (2001). Using choice with game play to increase language skills and interactive behaviors in children with autism. *Journal of Positive Behavior Interventions*, 3(3), 131-151. doi: 10.1177/109830070100300302

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Dudley, L. L., Johnson, C., & Barnes, R. S. (2002). Decreasing rumination using a starchy food satiation procedure. *Behavioral Interventions*, 17(1), 21-29. doi: 10.1002/bin.104

Dyer, K., Dunlap, G., & Winterling, V. (1990). Effects of choice making on the serious problem behaviors of students with severe handicaps. *Journal of Applied Behavior Analysis*, 23(4), 515-524. doi: 10.1901/jaba.1990.23-515

Graff, R. B., & Green, G. (2004). Two methods for teaching simple visual discriminations to learners with severe disabilities. *Research in Developmental Disabilities*, 25(3), 295-307. doi: 10.1016/j.ridd.2003.08.002

Hagopian, L. P., & Toole, L. M. (2009). Effects of response blocking and competing stimuli on stereotypic behavior. *Behavioral Interventions*, 24(2), 117-125. doi: 10.1002/bin.278

Haley, J. L., Heick, P. F., & Luiselli, J. K. (2010). Use of an antecedent intervention to decrease vocal stereotypy of a tick

Scuola elementare (6-11 anni)

Buckley, S. D., & Newchok, D. K. (2006). Analysis and treatment of problem behavior evoked by music. *Journal of Applied Behavior Analysis*, 39(1), 141-144. doi: 10.1901/jaba.2006.120-04

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Charlop, M. H., Kurtz, P. F., & Casey, F. G. (1990). Using aberrant behaviors as reinforcers for autistic children. *Journal of Applied Behavior Analysis*, 23(2), 163-181. doi: 10.1901/jaba.1990.23-163

DeLeon, I. G., Anders, B. M., Rodriguez-Catter, V., & Neidert, P. L. (2000). The effects of noncontingent access to single-versus multiple-stimulus sets on self-injurious behavior. *Journal of Applied Behavior Analysis*, 33(4), 623-626. doi: 10.1901/jaba.2000.33-623

Graff, R. B., & Libby, M. E. (1999). A comparison of presession and within-session reinforcement choice. *Journal of Applied Behavior Analysis*, 32(2), 161-173. doi: 10.1901/jaba.1999.32-161

*Hagopian, L. P., Bruzek, J. L., Bowman, L. G., & Jennett, H. K. (2007). Assessment and treatment of problem behavior occasioned by interruption of free-operant behavior. *Journal of Applied Behavior Analysis*, 40(1), 89-103. doi:

Higbee, T. S., Carr, J. E., & Patel, M. R. (2002). The effects of interpolated reinforcement on resistance to extinction in children diagnosed with autism: A preliminary investigation. *Research in developmental disabilities*, 23(1), 61-78. doi: 10.1016/S0891-4222(01)00092-0

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Leung, J. P., & Wu, K. I. (1997). Teaching receptive naming of Chinese characters to children with autism by incorporating echolalia. *Journal of Applied Behavior Analysis*, 30(1), 59-68. doi: 10.1901/jaba.1997.30-59

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Machalicek, W., O'Reilly, M., Chan, J. M., Lang, R., Rispoli, M., Davis, T., ... & Didden, R. (2009). Using videoconferencingto conduct functional analysis of challenging behavior and develop classroom behavioral support plans for students with autism. *Education and Training in Developmental Disabilities*, 44(2), 207.

Milo, J. S., Mace, F. C., & Nevin, J. A. (2010). The effects of constant versus varied reinforcers on preference and resistance to change. *Journal of the experimental analysis of behavior*, 93(3), 385-394. doi: 10.1901/jeab.2010.93-385

Newman, B. (2005). Self-management of initiations by students diagnosed with autism. *The Analysis of Verbal Behavior*, 21(1), 117

*Nuzzolo-Gomez, R., Leonard, M. A., Ortiz, E., Rivera, C. M., & Greer, R. D. (2002). Teaching children with autism to prefer books or toys over stereotypy or passivity. *Journal of Positive Behavior Interventions*, 4(2), 80-87. doi: 10.1177/109830070200400203

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*Stevens, C., Sidener, T. M., Reeve, S. A., & Sidener, D. W. (2011). Effects of behavior-specific and general praise, on acquisition of tacts in children with pervasive developmental disorders. *Research in Autism Spectrum Disorders*, 5(1), 666-669. doi: 10.1016/j.rasd.2010.08.003

Scuola media (12-14 anni)

Graff, R. B., &Larsen, J. (2011). The relation between obtained preference value and reinforcer potency. *Behavioral Interventions*, 26(2), 125-133. doi: 10.1002/bin.325

*Hagopian, L. P., Bruzek, J. L., Bowman, L. G., & Jennett, H. K. (2007). Assessment and treatment of problem behavior occasioned by interruption of free-operant behavior. *Journal of Applied Behavior Analysis*, 40(1), 89-103. doi: 10.1901/jaba.2007.63-05

Hagopian, L. P., Farrell, D. A., & Amari, A. (1996). Treating total liquid refusal with backward chainingand fading. *Journal of Applied Behavior Analysis*, 29(4), 573-575. doi: 10.1901/jaba.1996.29-573

Harchik, A. E., Harchik, A. J., Luce, S. C., & Sherman, J. A. (1990). Teaching autistic and severely handicapped children to recruit praise: Acquisition and generalization. *Research in developmental disabilities*, 11(1), 77-95. doi: 10.1016/0891-4222(90)90006-T

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Scuola superiore (15-22 anni)

Falcomata, T. S., Roane, H. S., Hovanetz, A. N., Kettering, T. L., & Keeney, K. M. (2004). An evaluation of response cost in the treatment of inappropriate vocalizations maintained by automatic reinforcement. *Journal of Applied Behavior Analysis*, 37(1), 83-87. doi: 10.1901/jaba.2004.37-83

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*Lee, R., & Sturmey, P. (2006). The effects of lag schedules and preferred materials on variable responding in students with autism. *Journal of Autism and Developmental Disorders*, 36(3), 421-428. doi: 10.1007/s10803-006-0080-7

McDonald, M. E., & Hemmes, N. S. (2003). Increases in social initiation toward an adolescent with autism: reciprocity effects. *Research in Developmental Disabilities*, 24(6), 453-465. doi: 10.1016/j.ridd.2003.04.001

Piazza, C. C., Hanley, G. P., & Fisher, W. W. (1996). Functional analysis and treatment of cigarette pica. *Journal of Applied Behavior Analysis*, 29(4), 437-450. doi: 10.1901/jaba.1996.29-437

*Stevens, C., Sidener, T. M., Reeve, S. A., & Sidener, D. W. (2011). Effects of behavior-specific and general praise, on acquisition of tacts in children with pervasive developmental disorders. *Research in Autism Spectrum Disorders*, 5(1), 666-669. doi: 10.1016/j.rasd.2010.08.003

*Research which included participants in multiple age ranges