Table 1. Search Keywords

Databases	Search Strategy				
CINAHL, ERIC, ProQuest, and PsycINFO	D reinforcer assessment AND severe disabilities				
	D reinforcer assessment AND special education				
	D preference assessment AND severe disabilities				
	D preference assessment AND special education				
	D reinforcers AND severe disabilities				
	D reinforcers AND special education				
	D preferences AND severe disabilities				
	D preferences AND special education				

Note. CINAHL = Cumulative Index of Nursing and Allied Health Literature; D= descriptors; ERIC= Educational Resource Information Clearinghouse.

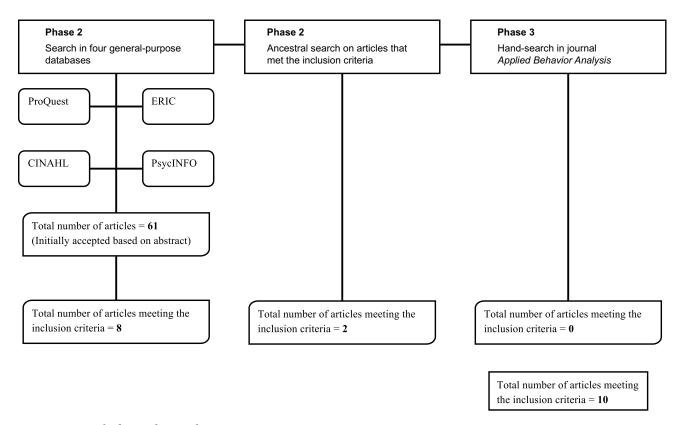


Figure 1. Multifaceted Search Process

Table 2. Formal Communication Skills Assessment Conducted Prior to Preference Assessment

		Communication Skills Assessment		Method		
		Receptive	Expressive	SSR	Quality	Identification
Reference	n	Language	Language	Design	Rating	of Preferences
Grindle & Remington (2005)	3	BPVS 2:8 equivalent 4:6 equivalent 3:10 equivalent	Matching skills 1-step directions*	ATD	Adequate	Two assessments (with variations) identified preferred stimuli to serve as reinforcers. Results indicated that items identified as highly preferred served as strong reinforcers whereas the lower preferred items did not.
Kang et al. (2013)	3	PLS™ <1 equivalent 2:1 equivalent NR	PLS 0:11 equivalent 2:1 equivalent NR	ATD	Weak	Two assessments identified preferred stimuli that served as reinforcers. A comparative assessment between social and tangible reinforcers resulted in similar effectiveness. However, tangible reinforcers contributed to more stereotypical behavior.
Keen & Pennell (2010)	4	PPVT™  2:6 equivalent  2:7 equivalent  2:10 equivalent  2:10 equivalent	EVT <sup>™</sup> <2 equivalent 3:5 equivalent 3:5 equivalent 3:2 equivalent	Withdrawal	Weak	Two assessments were used to identify reinforcers and engagement (time and quality) patterns. Results indicated the quality of engagement did not predict reinforcer effectiveness.
Kooistra, Buchmeier, & Klatt (2012)	2	PLS 67 raw score 67 raw score	PLS NR 56 raw score	M-ED	Weak	An assessment identified highly preferred stimuli that were used during tact training to assess the emergence of manding. An initial increase in manding occurred when participants were deprived of the stimulus; however no significant results were obtained (i.e., requesting stimuli were not consistently evident).
Mason, McGee, Farmer-Dougan, & Risley (1989)	3	PPVT and VLDS 3:0 equivalent 3:0 equivalent 1:0 equivalent	VLDS 2/speech 1:0 equivalent	MBD across participants	Weak	A reinforcer assessment package was effective in identifying reinforcers. Results highlighted the importance of this assessment and indicated a decrease in maladaptive behaviors.
Petursdottir, Carp, Matthies, & Esch (2011)	3	BLAF 2/minimal intraverbals; 1/N/R	BLAF 2/limited echoic-phrases; 1/infrequent vocal play	Reversal and MBD across participants	Weak	Two assessments were conducted to identify preferred stimuli that could be paired with auditory stimuli to determine if auditory stimuli could become a reinforcer. Initial increases were noted during a deprivation condition, but for 2 participants consistent preferences were not identified.

Note. ATD = alternating treatment design; BLA = Behavioral Language Assessment Form; BPVS = The British Picture Vocabulary Scale; EVT = Expressive Vocabulary Test; MBD = multiple baseline design; M-ED = multi-element design; VLDS = Mecham's Verbal Language Development Scale; NR = not reported; PPVT = Peabody Picture Vocabulary Test; PLS = Preschool Language Scale; SSR = single subject research; \* = informal assessment conducted for expressive language.

Table 3. Informal Communication Skills Assessment Conducted Prior to Preference Assessment

		Communication Skills Assessment		Method		
Reference	n	Receptive Language	Expressive Language	SSR Design	Quality Rating	Identification of Preferences
Clevenger & Graff (2005)	6	Match: picture-to-object and object-to-picture	3/limited speech, symbols, and manual signs; 3/ manual signs	Withdrawal	Weak	Two assessments were similar in identifying highly preferred stimuli that functioned as reinforcers. However, preference hierarchies were different for 3 participants with matching skills.
Graff & Gibson (2003)	4	Match: picture-to-object and object-to-picture	2/symbols and manual signs; 2/ symbol system	Withdrawal and ATD	Weak	Three assessments were compared to pictorial preference assessments yielding similar results. Results confirmed stimuli identified as highly preferred also functioned as reinforcers.
Groskreutz & Graff (2009)	5	Match: photo-to-object and object-to-photo	1/speech 1/symbol system 1/ symbol system and speech 2/limited speech, symbol systems, and manual signs	Withdrawal and ATD	Weak	Two assessments (with variations) identified preferences that served as reinforcers. Results during the selection of visual representation (of the stimuli) without access were accurate in identifying reinforcers and took less time to administer.
Nuernberger, Smith, Czapar, & Klatt (2012)	3	Match: object-to-picture and receptively identify pictures	-	M-ED and Reversal	Weak	Two assessments were used to identify if social interactions also served as reinforcers. A hierarchy of preferred social interaction was conducted. Results indicated that a clear selection of which students preferred social interaction was obtained.

Note. ATD = alternating treatment design; M-ED = multi-element design; SSR = single subject research.