

Choice Making

This is an alternate version of the characteristics overview chart on the next page. It is provided for accessibility.

Verbal skills

- Nonverbal
- Mixed
- Verbal

Grade Level

- PK
- Elementary
- Middle/High


Cognitive Level

- Classic

Areas Addressed

- (Pre)Academic/Cognitive/Academic
- Adaptive Behavior/Daily Living
- Behavior
- Communication/Speech

Choice Making

 Verbal Skills	Grade Levels	Cognitive Level	Areas Addressed
<input checked="" type="checkbox"/> Nonverbal	<input checked="" type="checkbox"/> PK	<input checked="" type="checkbox"/> Classic	<input checked="" type="checkbox"/> (Pre)Academic/ Cognitive/Academic
<input checked="" type="checkbox"/> Mixed	<input checked="" type="checkbox"/> Elementary	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Adaptive Behavior/ Daily Living
<input checked="" type="checkbox"/> Verbal	<input checked="" type="checkbox"/> Middle/High	Functioning	<input checked="" type="checkbox"/> Behavior
			<input checked="" type="checkbox"/> Communication/Speech
			<input type="checkbox"/> Social/Emotional



Brief Introduction

Research has shown that choice-making opportunities are effective in reducing problem behavior and increasing task engagement. As a preventive intervention, choice making enables students to participate in activities, including non-preferred or less preferred activities.



Description

Choice making is an effective intervention for increasing the active participation of individuals with autism (AU). For example, providing choice-making opportunities has demonstrated successful outcomes to manage problem behavior. Choices indicating personal preferences can also function as powerful reinforcers. Instructors and parents can use various options of choice to encourage individual performance. For example, if a student has a chance to choose preferred rewards, a target behavior is more likely to occur.

Instructors can gradually expand the number of choices based on the student's needs and level of functioning, and students can respond in various ways by pointing at objects or pictures or by verbalizing their choices. Choice making can be a reinforcer as well as a desired behavior associated with other reinforcers (i.e., when a student responds appropriately to making a choice, an instructor allows the student to play with a computer for 10 minutes).

In many cases, choice making is used with other visual supports (i.e., activity schedules or picture boards) and verbal or physical prompts to increase engagement in activities. Peck et al. (1996) described five types of adult responses in their procedure of choice-making treatment: (a) providing choices (i.e., adults

Interventions

give a choice to a student by saying “Which one do you want? You choose”); (b) choice prompts (i.e., adults provide verbal or physical prompts by indicating the options or by placing the student’s hand on the choice board or objects); (c) task prompts (i.e., adults direct the option by saying “Take this” and providing physical guidance); (d) social interactions (i.e., positive social contact with the student, including praise, talking about the objects or activities, smiles, tickles, or hugs); and (e) redirection or block (i.e., restricting the student’s hand or correcting his posture to see the options when the student’s response was inappropriate or irrelevant to the task).

Examples of choice making include:

- Choosing own clothes or shoes daily at home
- Selecting own rewards (juice or apple)
- Identifying activities or materials for a given activity
- Deciding menu at a restaurant
- Choosing colors for writing or painting

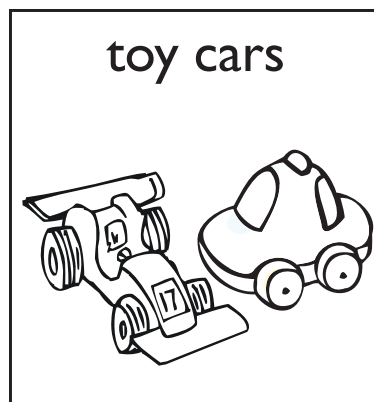
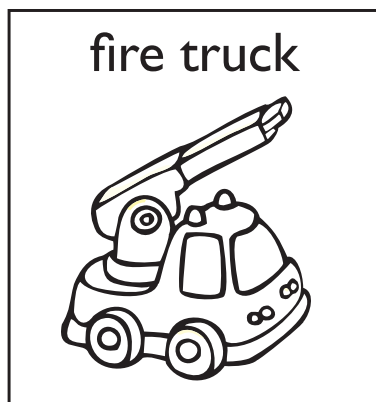


Steps

The following are general steps for implementing choice making:

1. Assess the student’s needs prior to teaching choice making. It may be necessary to teach prerequisite skills if he does not understand the association between a choice (a stimulus) and a consequence of choice making.
2. Identify the target behavior to increase or decrease.
3. Provide choices.
4. Evaluate the procedure and the student’s progress.

Sample Choice Board





Brief Example

Ashley, a second grader, engages in severe self-injurious behavior (i.e., head or ear hitting), tantrums and meltdowns, and throwing things. During free play time, she usually roams the room and does not engage in play with her peers. She has limited verbal language and uses simple symbols, such as yes/no pictures, by pointing.

Ms. Collins prioritized the target behavior as head hitting, defined as Ashley using her hand(s) and making forceful contact with her head. Ms. Collins observed Ashley and conducted a functional behavior assessment to identify the antecedent and the consequence of the behavior. She found that Ashley almost always engaged in self-injurious behavior when given a difficult task.

Ms. Collins planned to provide choice-making opportunities for Ashley when she is given a task. The appropriate choice response was defined as pointing to one of two pictures when the teacher presents the picture choice-board to Ashley. Ms. Collins also used verbal and physical prompts based on Ashley's response. When Ashley performs the appropriate response, she is given free time to roam the room for five minutes. After collecting data about the frequency of target behavior, Ms. Collins and paraprofessionals were excited to see how Ashley's self-injurious behavior, as well as emotional meltdowns, had decreased.



Tips for Modifications

AAC devices can be very useful, especially for students who have difficulties using verbal communication skills to make their choices. Based on students' abilities, pictures, symbols, and tangible objects may be used.



Summary

Choice making is an effective and commonly used strategy to decrease problem behavior and increase participation in activities. Teachers and parents can use choice making in various situations based on the child's level of language or needs. Prompting is used to encourage the student to perform appropriate responses.



Research Table

# of Studies	Ages (years)	Sample Size	Area(s) Addressed	Outcome
11	2-21	25	Appropriate behavior; motivation, aggressive/destructive behavior; problem behavior; task engagement, rejections, social play/pragmatic skills	+



Studies Cited in the Research Table

- Carlson, J. I., Luiselli, J. K., Slyman, A., & Markowski, A. (2008). Choice-making as intervention for public disrobing in children with developmental disabilities. *Journal of Positive Behavior Interventions, 10*, 86-90.

Two children with AU and pervasive developmental disorders, aged 5 and 13 years, participated in the study. The intervention gave the children a choice to change into high-preference clothes at scheduled opportunities during the day. Scheduling acceptable opportunities to change clothes appeared to function as an operation that lessened each child's motivation to disrobe. Clinical implications of these findings are discussed.
- Foxx, R. M., & Garito, J. (2007). The long-term successful treatment of the very severe behaviors of a preadolescent with autism. *Behavioral Interventions: Special Issue: The Treatment and Assessment of the Severe Behavior of Individuals with Autism and Developmental Disabilities, 22*, 69-82.

A program was developed to reduce the severe behavior (aggression, self-injury, dangerous behavior; disruptive behavior; induced vomiting, and inappropriate toileting) of a 12-year-old boy with AU. The program included a high density of positive reinforcement, tokens, choice making, contingent exercise, and overcorrection. Treatment occurred across three sites: home, a community-based site, and a self-contained classroom in a public school. All of the boy's severe behaviors were reduced to at or near zero levels, and at the time of the study these effects had been maintained for two years.
- Foxx, R. M., & Meindl, J. (2007). The long-term successful treatment of the aggressive/destructive behaviors of a preadolescent with autism. *Behavioral Interventions: Special Issue: The Treatment and Assessment of the Severe Behavior of Individuals with AU and Developmental Disabilities, 22*, 83-97.

A program was developed to reduce the aggressive/destructive behavior of a 13-year-old boy with AU. The program included a high density of positive reinforcement, tokens, choice making, response cost, overcorrection, and physical restraint. The participant made excellent progress in a number of academic areas.
- Harding, J. W., Wacker, D. P., Berg, W. K., Barretto, A., & Rankin, B. (2002). Assessment and treatment of severe behavior problems using choice-making procedures. *Education & Treatment of Children, 25*, 26-46.

Two preschool-aged children (aged 4 and 6 years) diagnosed with pervasive developmental disorders who displayed severe problem behavior participated in the study. The results demonstrated that the introduction of choice making embedded within activity schedules increased time on task for both participants.
- Carter, C. M. (2001). Using choice with game play to increase language skills and interactive behaviors in children with autism. *Journal of Positive Behavioral Interventions, 3*(3), 131-151.

Three participants (two girls both aged 5 and one boy aged 7) exhibited problem behaviors, a lack of engagement in interactive play, and delayed acquisition of grammatical morphemes. Results indicated that when choice was permitted during language intervention within a play context, disruptive behaviors were considerably reduced and levels of appropriate social play/pragmatic skills increased, thereby reducing interventionist redirection.

6. Peterson, S.M.P., Caniglia, C., & Royster, A. J. (2001). Application of choice-making intervention for a student with multiply maintained problem behavior. *Focus on Autism and Other Developmental Disabilities, 16*, 240-246.
A boy with AU (aged 10) with multiple problem behaviors participated in the study. The intervention involved rewarding the participant with breaks from work after he completed assigned tasks. It was concluded that choice making was an effective intervention for young children with AU who display problem behavior for multiple reasons.
7. Moes, D. R. (1998). Integrating choice-making opportunities within teacher-assigned academic tasks to facilitate the performance of children with autism. *Journal of the Association for Persons with Severe Handicaps, 23*, 319-328.
Four children with AU (aged 5-9 years) participated in the study. Results showed that providing students with opportunities to make choices regarding the order of task completion and use of stimulus materials improved participants' accuracy, productivity, and affect as well as reduced their disruptive behaviors.
8. Peck, S. M., Wacker, D. P., Berg, W. K., Cooper, L. J., Brown, K. A., Richman, D., McComas, J. J., Frischmeyer, P., & Millard, T. (1996). Choice-making treatment of young children's severe behavior problems. *Journal of Applied Behavior Analysis, 29*, 263-290.
Five children (aged 2 to 4 years) with developmental disabilities who had behavior problems participated in the study. Treatment packages involving choice making via manding were implemented to decrease inappropriate behavior and to increase mands. Results replicated and extended previous applications of choice making to severe behavior disorders and across behaviors maintained by positive and negative reinforcement.
9. Vaughn, B., & Horner, R. H. (1995). Effects of concrete versus verbal choice systems on problem behavior. *AAC: Augmentative and Alternative Communication, 11*, 89-92.
This study explored the impact of choice making on the problem behaviors of a 21-year-old man with AU and severe intellectual disabilities. The results contribute to the literature supporting the use of choice making as a means of reducing problem behavior; but adds the caveat that, to be effective, choice-making procedures must be designed to ensure that the preferences of the individual are defined in a valid manner.
10. Carr, E. G., & Carlson, J. I. (1993). Reduction of severe behavior problems in the community using a multicomponent treatment approach. *Journal of Applied Behavior Analysis, 26*, 157-172.
Three males with AU (aged 16-18) participated in a study designed to evaluate a multi-component approach to remediating problem behavior. Results showed substantial increases in task completion and duration of time spent in supermarkets without problem behavior. Outcomes were socially validated by group-home staff and cashiers.
11. 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*, 515-524.
This study assessed the impact of choice making on the serious problem behaviors of students (aged 5 and 11) with severe AU and/or mental retardation. Results showed consistently reduced levels of problem behaviors (i.e., aggression) when participants were given opportunities to make choices among instructional tasks and reinforcers. No systematic differences were found in the rate of correct responding between the two conditions.



References

- Carlson, J. I., Luiselli, J. K., Slyman, A., & Markowski, A. (2008). Choice-making as intervention for public disrobing in children with developmental disabilities. *Journal of Positive Behavior Interventions, 10*, 86-90.
- Carr, E. G., & Carlson, J. I. (1993). Reduction of severe behavior problems in the community using a multicomponent treatment approach. *Journal of Applied Behavior Analysis, 26*, 157-172.
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- Harding, J. W., Wacker, D. P., Berg, W. K., Barretto, A., & Rankin, B. (2002). Assessment and treatment of severe behavior problems using choice-making procedures. *Education & Treatment of Children, 25*, 26-46.
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Resources and Materials

- Choice Making: www.autismnetwork.org/modules/behavior/choice/index.html
This is an interactive learning module presented in a user-friendly format.