

Assessment Name:
Choice-Based Stimulus Preference Assessment
Multiple Stimulus Preference Assessment without Replacement (MSWO)

Validated Purpose of Assessment Method

Screening	Diagnostic	Progress Monitoring
	X	

Overview:

The success of reinforcement-based interventions is dependent upon an educator's ability to determine reinforcing stimuli that function as powerful rewards/consequences. Class-wide rewards might not be rewarding for all students, especially those who are at an increased risk for maladaptive academic and social behaviors. The application of preferred stimuli can serve as a powerful reward that increases a student's success of adopting appropriate alternative academic and social behaviors. Multiple Stimulus Preference Assessment without Replacement (MSWO) is a no cost diagnostic tool that generates a ranked order list of preferences for a specific individual. MSWO assessments allow the student to rank stimuli that are most preferred among an array of options. Various stimuli can be utilized as choices in the preference assessment including: tangibles, opportunities for attention, and preferred activities. Choices can be presented in verbal, pictorial or written formats.

Brief review of validity and reliability evidence:

Several studies have evaluated the consistency of rankings between preference assessment measures, and the predictive validity of a MSWO preference assessment and reinforcer potency. Research has primarily focused on developmentally delayed persons and individuals identified with emotional-behavior disorders. DeLeon & Iwata (1996) measured the consistency of rankings across three formats of preference assessments. The MSWO procedure as measured by Kendall's rank coefficient of concordance produced a across administration rankings mean coefficient of .83. Call (2012) research study conducted an analysis of highly preferred stimuli as determined by a MSWO preference assessment and reinforcer efficacy. Kendall's rank coefficient of concordance yielded a statistically significant modest correlation of .379 (Kendall's tau-b). Paramore & Higbee (2005) evaluated high, mid, and low preferences as determined by a MSWO assessment and on-task behavior of three children identified with an emotional-behavior disorder. The study concluded high preference stimuli produced the highest percentage of on-task behavior.

Strengths and Weaknesses:

MSWO preference assessments allow the student to make choices of stimuli that are highly preferred among an array of options. Choice can serve as a powerful motivator to behavior change. A variety of stimuli can be used as choices in the preference assessment including: tangibles, opportunities for attention, and preferred activities. By incorporating a variety of stimuli, both students who have maladaptive attention based behavior and escape based behavior can have potential reinforcers. Choices can be customizable to the individual student's need and developmental level and be presented in a verbal, pictorial or written format.

The administration of MSWO preference assessments can be time consuming. MSWO preference assessments that contain more items have a lengthier completion time. The most effective practice is regular assessment of student's preferences, because student's preferences can intermittently change. To alleviate confusion, educators need to instruct students on the different reinforcement options and schedules of reinforcement before administration of the MSWO. Most importantly, students need to have the ability to make validated choices. All items and/or activities presented to the student on the preference assessment need to be readily available and cost effective to the school.

Administration Steps:

- 1) Identify stimuli (preferred items or activities) that can be evaluated as a reinforcement system for the student. Brief caregiver and student interviews can provide ideas for potential stimuli.
- 2) Determine the number of choices (the length of the assessment and task complexity increases with the more choices offered to the student).
- 3) Determine the representation of the stimuli to the student: tangible, pictorial, or written format.
- 4) Sequence stimuli in randomized order in a straight line
- 5) Request student to select the one most preferred.
- 6) Remove the selected item from the array, and rearrange the remaining items
- 7) Record the student's choice on the MSWO data form
- 8) Prompt student to make another selection of the most preferred from the remaining items
- 9) Continue steps 6 through 8 until the student has selected all stimuli, a set criterion has been met, or the student has stopped making selections.
- 10) Calculate the percentage of trials each stimulus was selected by dividing the number of times it was selected by the number of times the stimulus was included in the array.
- 11) Examine stability of preferences to determine if it is necessary to complete the process more than three times.

Materials:

representation of stimuli items (objects, pictorial representations, or written text)
MSWO data sheet

Data coding/sorting/presenting process:

The evaluator determines the amount of array presentations to be completed with a student (1-6 presentations). Confirmatory results between array presentations, increases validity of the most preferred items.

Analysis Guidelines:

A forced choice presentation can better differentiate preferred from non-preferred stimuli over an interview format. Across repeated paired comparisons, the stimuli chosen the most times are more reinforcing to the student. Calculating summed trials determines the hierarchy of preferred items.

Additional Resources:

The Tiger & Kliebert (2011) article provides a description and comparison of many preference assessments, details procedural steps, and provides examples of data sheets.

References:

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