

How to find out what a child will work for.

What it is. A **preference assessment** is a short, structured way to ask “what do you want most?” without needing words. You put a few items in front of someone, let them pick, and write down the order. A common one in ABA is the **MSWO**, short for *multiple stimulus without replacement*: several items go on the table at once, and each one picked stays off the table for the rest of the round.

Why it matters. **Reinforcement** is something good that follows a behavior and makes that behavior happen more. It only works if the thing you offer is something the person wants, today. Adults guess, and a wrong guess can cost weeks of lessons before anyone notices. An MSWO swaps the guess for a ranked list: five items, three rounds, about ten minutes.

HOW TO DO IT YOURSELF

How to run an MSWO yourself, in seven steps.

1. **Pick five to eight items.** Things they already reach for: ask the family, watch free play. One kind per assessment: all snacks, or all toys and activities.
2. **Let them try each one.** A few seconds with each toy, one small bite of each snack. Now every pick is an informed pick.
3. **Line them up and say “Pick one.”** In a row, evenly spaced, within easy reach. Don’t point at, look at or name any item.
4. **Give what they pick.** About 30 seconds of play, or the one small bite. Write it down as pick 1.

5. **Take it away, then rotate.** The picked item stays off the table for the rest of the round. Move the item on the far left to the far right and close the gaps, so the spot on the table doesn't decide for them. Say "Pick one" again.
 6. **Keep going until the table is empty.** If no pick comes in about 30 seconds, end the round there. Items still on the table get no pick that round.
 7. **Run three rounds, then score.** For each item, the **selection percentage** is times picked $\div$ times it was on the table $\times$ 100. Highest percentage, top of the list.
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The by-hand shortcut. An item chosen at pick 3 was on the table for 3 picks. So add up each item's pick numbers across the rounds: that is how many times it was on the table. Picked at 1, 1 and 2 in three rounds? $3 \div 4 = 75\%$. Not picked in a round? Count every pick that round had, plus 1 for the pick that never came.

SETTLED

The MSWO ranked items in a similar order to the older one-pair-at-a-time method, in less than half the time (DeLeon & Iwata, 1996). Three rounds was enough with young children in an early-intervention program, and the items it ranked high did work as reinforcers when they were tested in lessons (Carr, Nicolson & Higbee, 2000).

COMMON PRACTICE

Run it again when the top item stops working, and keep a second and third item ready.
Not a rule; a habit that saves sessions.

UNKNOWN UNTIL YOU TRY

Whether the top item will work for *this* task. A preference is a prediction. The item is a **reinforcer** only if the behavior it follows goes up.

WORKED EXAMPLE

Three rounds, five toys, one clear winner.

Made-up example. The child, the toys and the picks below are invented to show the method.

Leo is five. His team lines up five toys: bubbles, a toy car, a tablet, a sticker book and clay. Each box shows when Leo picked that toy in that round (1 = first).

TOY	ROUND 1	ROUND 2	ROUND 3	ON THE TABLE	SCORE
Tablet	1	1	2	4	$3 \div 4 = 75\%$
Bubbles	2	3	1	6	$3 \div 6 = 50\%$
Toy car	3	2	3	8	$3 \div 8 = 38\%$
Clay	4	5	4	13	$3 \div 13 = 23\%$
Sticker book	5	4	5	14	$3 \div 14 = 21\%$

The tablet is the top pick; bubbles is a strong second. Save the tablet for the hardest work and use bubbles for the rest. Look at round 3, though: bubbles came first. Preferences move, which is why you keep a second item ready and run it again when the top one stops working.

MISTAKES TO AVOID

Ways a preference assessment misleads you.

- Mixing snacks and toys in one row. Food tends to win and pushes the toys down the list, even toys that can still work as reinforcers (DeLeon, Iwata & Roscoe, 1997). Run them separately.

- Leaving items in the same spots. Some children pick a side, not an item. Rotate after every pick.
- Steering the pick. Pointing at, looking at or naming one item while you say "Pick one" changes the answer.
- Long turns with each item. 30 seconds of play or one small bite keeps it short, so they are not tired or full by round three.
- Running it once and trusting it for months. Run it again when the top item stops working.
- Calling the top pick a reinforcer before you have seen it work. It is a reinforcer only if the behavior it follows goes up.

TRY IT

One question, then the answer.

One made-up round, four toys. Sam picks the puzzle first, then the ball, then the blocks, then the crayons. What is the ball's selection percentage for this round, and why isn't it 25%?

▼ Show the answer, and why

50%. The ball was on the table for two picks: the first, when Sam chose the puzzle, and the second, when Sam chose the ball. Picked once in two chances: $1 \div 2 \times 100 = 50\%$. It isn't 1 in 4, because once it was picked it was off the table. The score only counts the picks where it could have been chosen.

SOMETHING TO KEEP

MSWO data sheet.

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DATE	KIND OF ITEMS (SNACKS, OR TOYS AND ACTIVITIES)	RUN BY

ITEM	ROUND 1	ROUND 2	ROUND 3	TIMES PICKED	ON THE TABLE	%	RANK

HOW TO SCORE

On the table = the item's pick numbers added up. Not picked in a round? Add every pick that round had, plus 1.

% = times picked ÷ on the table × 100. Highest % is rank 1.

Top two, and when we will run it again:

WHERE DRAGEN HELPS

From the table to the report.

A ranking earns its keep twice: in the next session, where the top item follows the hardest work, and in the progress report, where the result goes in with its date.

DRAGENprogress drafts the data half of a six-month progress report: starting level, current level, trend and graphs. What the results mean stays yours to write and sign.

S O U R C E

Where this comes from.

DeLeon & Iwata (1996), *Journal of Applied Behavior Analysis*, 29, 519–533: the MSWO itself. Carr, Nicolson & Higbee (2000), *JABA*, 33, 353–357: the brief three-round version. DeLeon, Iwata & Roscoe (1997), *JABA*, 30, 475–484: why snacks and toys go in separate rows.

Examples on this page are made up. They contain no client, student or family information. This lesson teaches a method; it does not replace your BCBA, your program, or your payer's written rules.