

Supplementary Table 1. Preference assessment data collection

Trial #	Stimulus L-R	Trial #	Stimulus L-R
1	1-2	7	4-2
2	2-3	8	2-1
3	3-4	9	3-2
4	1-4	10	4-3
5	2-4	11	4-1
6	1-3	12	3-1

Supplementary Table 2. Percent of trials chosen for each item

Stimulus item	Number of times chosen	Number of trials	Percentage of trials chosen
1)			
2)			
3)			
4)			

Supplementary Table 3. Operant conditioning data sheet

Date							
Researcher							
Minute	Time	Random	Patterned	Resting	Interaction	Other	Biting (Frequency)
1	0-10						
	11-20						
	21-30						
	31-40						
	41-50						
	51-60						
2	0-10						
	11-20						
	21-30						
	31-40						
	41-50						
	51-60						
3	0-10						
	11-20						
	21-30						
	31-40						
	41-50						
	51-60						
4	0-10						
	11-20						
	21-30						
	31-40						
	41-50						
	51-60						
5	0-10						
	11-20						
	21-30						
	31-40						
	41-50						
	51-60						
Total							

Random: swimming in ways other than pattern swimming (e.g. if the turtle is in front of the tank and then moves to the back wall of the tank).
 Patterned: swimming in a repetitive pattern around the tank, scored within the interval when the pattern began the third time in a row (e.g. if the turtle were to swim along the mirrored front of the tank along the same line back and forth).
 Resting: any period of inactivity (e.g. the turtle was unmoving in the bottom of the tank)
 Interaction: investigation of the enrichment device excluding biting- pushing and rubbing (e.g. if the turtle pushes the device with a closed beak).
 Other: Any additional non-categorized behavior

Data sheet

Primary Observer:
Date:
Session #:
Secondary Observer:

Video #:
List of Stimulus Items:
1.
2.
3.
4.