SO Science Of Behavior Change

ABC Brain Games: Food IAT -1

General Outline of Food IAT task:

Initial Set Up:

1. Set the laptop on a stable surface, like a desk or table.

Note: If the Orby buttons, Swifty, and connector are already connected, double check each component step by step each time.



Figure 1: laptop setup

- 2. Plug the Orby buttons (Yellow buttons) into the jack connector.
- 3. Plug connector into the Swifty USB.
- 4. Plug the Swifty USB into the laptop
 On the back of the Swifty, switches for 1 and 2 must be
 switched OFF (toggle with paperclip). [See Figure 3]
- 5. Ensure the correct Orby buttons are connected into its corresponding jack.
 - A. Before starting the protocol, double check the LEFT / RIGHT inputs on any word processing program (e.g. Notepad)
 - 1. When pressed, the Left Orby button types out 1; the right Orby button types out 2.
 - If the Left Orby button types out a 2, and/or the Right Orby button types out a 1, check that the cable connections are properly placed in the corresponding jack.
 - B. The LEFT / RIGHT labels are in three places [See Figure 4]: back of each Orby buttons, each button jack, and the connector to Swifty.
 - C. Tip: the <u>L</u>eft Orby jack is angled (like an <u>L</u>); The <u>R</u>ight Orby jack is <u>R</u>ounded.



Figure 2: Orby buttons, Swifty, & connector



Figure 3: Swifty Configuration



Figusre 4: Left / Right label locations

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6. Arrange the Left Orby button on left side of the respondent and the Right Orby button on right side of the respondent [Figure 1].

- A. Put the extra length of the wires behind the laptop
- B. As long as the respondent has their hand on the corresponding Left / Right Orby buttons, it doesn't matter how the Orby buttons are set up on the surface or how close they are to the respondent.
- 7. Respondent should be seated in front of the laptop. Interviewer is seated to the side.
- 8. Ensure respondent can see the screen and reach the buttons and that interviewer can reach spacebar.

Software Set Up:



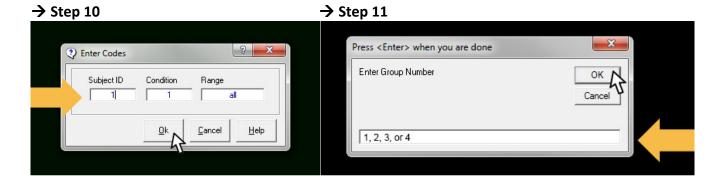


- 10. Launch the input file (Excel file with programming commands)
 - A. Click "File" and choose "Select and run input file" or Ctrl + S
 Select the correct .csv file ("SCIAT-chocolate") and click "Ok"
 S:\Research\Lumeng-Miller-rsrch\ABC Behavior Change (SOBC UH2)\Manuals and
 Protocols\Evaluation\Food Implicit Association Task (IAT)\Miller SCIAT Prototype 1.0



B. Or > "Run a recent input file" (shown below)

- 11. Enter the Participant ID number and press "Ok." (Leave Condition and Range as is)
- 12. Enter the Condition number on the next screen (1,2,3, or 4) ← See Part C



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13. Extra controls within the game:

- A. ESCAPE button will save up until the task was being run and can be used to halt protocol at any point. It can be used in cases when the task must be stopped (e.g. fire drill). If stopped in the middle of the protocol, it is likely that the data will be unusable. Make sure to ask child if they need to use the bathroom before the task to prevent compromising data.
- B. The program will give feedback if the respondent is going too slowly, but the interviewer must give feedback if respondent is not pressing the buttons. After a few seconds, the program will prompt "Please go faster."
- C. Barring any physical restrictions that require accommodation, the participant should keep their hands on the buttons at all times. There is an instruction screen that explains how to place one's hands, but the interviewer may be required to give gentle correction between rounds of the game.
- 14. Any feedback should be recorded in a technician log
 - A. Include any comments about child or environment that may affect validity of task (to refer to for quality control).
 - B. Eg. Child was fidgety, or was done at home with loud distractions (tv on, siblings in background, etc)

15. Data files

- Data files and logs are automatically generated.
 (Quality check: if loading time is >100 is too high)
- 2. Each trial will produce its own [Participant #].csv file & [Participant #]_log.csv (in the Log folder
 - A. Variable "RT" is reaction time and is the most important variable.
 - B. Variable "Trial" is the order of which the stimulus is written in the programming script
 - C. Variable "Order" is the actual order that the stimulus is presented when running the program

Food IAT Trial Design and Conditions

		Group A: Stop-Go				Group B: Go-Stop			
	#	Subgroup 1:		Subgroup 2:		Subgroup 1:		Subgroup 2:	
Block	Trials	stop/choc first		stop/choc second		stop/choc first		stop/choc second	
1	16	stop-	8 stop	stop-go	8 stop	go-	8 stop	go-stop	8 stop
_		go	8 go		8 go	stop	8 go		8 go
2	48	Stop/choc-	8 stop	stop-	20	go-	8 stop	go/choc-	20 stop
_		go	20 go	go/choc	stop	stop/choc	20 go	stop	8 go
			20 choc		8 go		20 choc		20 choc
					20				
					choc				
3	48	stop-	20 stop	stop/choc-	8 stop	go/choc-	20 stop	go-	8 stop
		go/choc	8 go	go	20 go	stop	8 go	stop/choc	20 go
			20 choc		20		20 choc		20 choc
					choc				
Condition #		1		2		3		4	