Manchester Picture Test Instructions

Performing the Manchester Picture Test (MPT)

The Manchester Picture Test was first devised by Thomas J Waston in 1957. It has since been updated with new words which are not phonetically balanced, but the overall frequency of consonant phonemes correlates significantly with that of spoken english.

The test is in the format of 6-word lists, each of which has 6 test words. Any of the 6 lists can be chosen as a practice list in order to familiarise the child with the test procedure and the Parrotplus. All the test words within a list are tested at the same level. In order to achieve a "Pass" at any level, a score of 5 or 6 out of 6 (83% of greater) must be obtained. If the test is being used to screen hearing, the test level should be 40 dBA. If it is being used as a test of speech discrimination, and the hearing thresholds are known, a start level of 20 dBA above the PTA is used. The level can be increased or decreased until the word discrimination threshold is achieved (the lowest level at which a pass is obtained).

Once the tester has selected a word list and level, the child is presented with the first matrix. Each test word is positioned randomly in a matrix with three similar sounding distracters. When the button on the Parrotplus is pressed, a voice will sound from the speaker saying: "Show me the 'test item'". The results are recorded on a results sheet.

Evaluation:

A trial has been carried out on 30 normally hearing children aged 3-6 years by Dr. Esther Harper, Community Paediatrician (Foyle Health & Social Services Trust) in Northern Ireland. All lists were shown statistically to be of equal difficulty and no individual word was more difficult than any other. There was more difficulty with discriminating fricatives, but this was expected due to the lower energy in fricatives and the error rate was halved compared to previous studies.

The trial compared the scores using a Parrot Speech Discrimination Tester programmed with the McCormick Toy Test with a Parrot programmed with the new Manchester Picture Test. It was found that there was a strong correlation between the scores of the two tests. There were also 2 other groups of 12 children:

1. Group one had normal hearing as defined by the BATOD groups, but had individual frequencies or the other ear outside normal
2. 2. Group two had mild, moderate and severe losses.

Regression analysis showed there is a strong correlation between the word discrimination level and the 5-frequency pure tone average, and that a formula can be used to predict the pure tone average.

Summary:

It was found that 100% of children with a 5-frequency pure tone threshold average better than 25dBHL achieved a score of 80% or better in the Manchester Picture Test at 40dB(A). It was also found that 100% of the children with a 5-frequency pure tone threshold average worse than 25dBHL did not achieve a score of 80%. Thus, the Parrot MPT was found to be a reliable test of hearing for speech in young children in a Clinic Setting.

The Manchester Picture Test word lists:

Words shown as bold type indicate the test words.

Parrot Menu	List A		List B		List C	
	List 1	List 2	List 3	List 4	List 5	List6
Matrix 1	Queen	**Dog**	Soap	Egg	Four	Whale
	Three	Clock	Comb	Leg	**Door**	Train
	Feet	Sock	**Ghost**	Ten	Horse	**Gate**
	Bee	Box	Boat	**Bed**	Fork	Snail
Matrix 2	**Train**	King	Tree	**Pig**	**Pen**	**Cheese**
	Plane	Feet	**Key**	Kite	Bell	Wheel
	Cake	**Tree**	Sea	Swing	Bread	Leaf
	Snake	Sweet	Wheel	Light	Egg	Three
Matrix 3	Van	Heart	**Fox**	Saw	Ring	Sock
	Flag	Head	One	Ball	Lip	**Frog**
	Hand	Car	Shop	**Horse**	**Fish**	One
	Watch	**Star**	Frog	Fork	Bin	Dog
Matrix 4	Clock	Five	Tap	Teeth	Cake	Van
	Fox	**Slide**	Cat	Key	**Snake**	Bag
	Shop	Pie	Bat	Queen	Spade	**Hand**
	Box	Bike	**Hat**	**Sweet**	Eight	Watch
Matrix 5	**Witch**	Sea	**Ring**	Eight	Ball	Bell
	Six	Cheese	Bin	**Whale**	Pan	Bread
	Pig	Bee	Witch	Plane	Flag	Nest
	Fish	**Leaf**	Six	Gate	**Wall**	**Leg**
Matrix 6	Hat	**Nest**	Book	Pan	**Knife**	Swing
	Bag	Pen	**Moon**	Tap	Kite	**Nine**
	Cat	Bin	Foot	**Man**	Five	Bike
	Man	Ten	Two	Bat	Light	Pie

Further details of the Manchester Picture Test can be found at

Educational guidance and the deaf child, Manchester University Press, Manchester, 1957, Ewing, Alexander, Speech Audiometry for Children, chapter 12 pg 278