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The effects of consonantal specificity, articulatory phonetics and prosody in young infants' lexical acquisition

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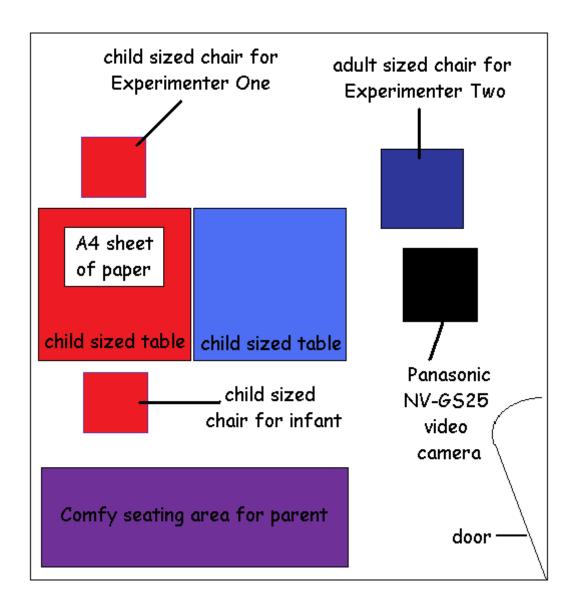


Figure 2. A plan of Babylab layout.

Information Sheet

Welcome to the Babylab. We are two Undergraduate Psychology students working with the Psychology Department, who are aiming to explore infants learning abilities for language.

We are trying to see whether young infants are able to distinguish the differences between consonant changes when learning new words and also whether they can focus on strong-weak patterned words (e.g. 'peebo') and weak-strong patterned words (e.g. 'peebo'). This experiment consists of a simple task of choosing a specific object that matches a word already spoken by the experimenter. With each pair of words that are presented, there will be one slight difference with the first consonant in each word being changed, for instance 'peebo' and 'beebo'.

Before commencing the experiment, we would like to ask you (the child's parent/guardian) to put on a pair of headphones. This is in order to avoid any accidental influence from yourself during the experimental procedure.

The experiment will involve your child sitting at a table facing the experimenter and being presented with two objects one after the other. The first will be placed down and called a non-word, for example 'peebo'. Another object will then be placed on table and the experimenter will call this a similar non-word, such as 'beebo'. These words will either be stressed at the first syllable or the last (e.g. 'peebo' or 'peebo'). A third object will then be shown to the infant and be called a 'peebo'. This object will then be placed in a container and the infant will be asked to place the other object (i.e. 'peebo') in the same container. What we will do is simply count how many times your child gave us the right object, depending on the stress pattern of the word being used. One of our hypotheses is that English children should be better with strong-weak words then weak-strong words, because strong-weak words are far more common in English.

There will always be two experimenters in the room whilst the experiment is running, who will be recording the results on a sheet. These experimenters have undergone a CRB check. We will also be using a video camera during the experiment, which will be for scoring purposes only. It will be positioned behind the child, so that the infants face will not be recorded and all that will be seen are the child's hands. No other people will have access to the tapes, other then those directly involved in the experiment. These tapes will be stored safely on the University premises and destroyed 5 years after publication. All results are completely anonymous and confidential and no other data will be recorded.

Prior to your attendance of the experiment, you would have been sent the Oxford Communicative Development Inventory (CDI) to fill out. This form simply show us how developed your child's vocabulary is.

You have the right to withdraw your child from the experiment at any point, before, during or after the experiment. If you have any questions or wish to withdraw results, please contact one of the experimenters.

<u>Undergraduate Students Experimenters:</u>

Victoria Farley – <u>victoria.farley@students.plymouth.ac.uk</u>
Amy Luck – amy.luck@students.plymouth.ac.uk

Our Supervisor

Caroline Floccia – caroline.floccia@plymouth.ac.uk

Consent Form

PLEASE TICK AS APPROPRIATE, SIGN AND DATE

	The objective of this research has been explained to me.
	I understand that I am free to withdraw from the research at any stage and ask for my data to be destroyed if I wish.
	I understand that the back and hands of my child will be filmed for scoring purposes and this recording will only be seen by the experimenters and their supervisor. The tape recording will then be stored safely at The University of Plymouth for 5 years after the publication of results.
	I understand that my anonymity is guaranteed, unless I state otherwise.
	I understand that the Principle Investigator of this work will have attempted, as far as possible, to avoid any risks. Health and safety would have been assessed separately by the appropriate authorities.
Under these	e circumstances, I agree that my childate in this study.
Name:	
Signature: .	
Date:	

Appendix D: Debrief

Debrief

Thank you for participating in this experiment. We are aiming to find out whether children show a preference to stressed patterned words rather than word onset. Once we have gathered and analysed this data, you will be informed of the findings of this experiment.

If you have any questions or wish to withdraw you child's data at any time, please feel free to contact one of the experiment team at any time.

Undergraduate Students Experimenters:

Victoria Farley — <u>victoria.farley@students.plymouth.ac.uk</u> Amy Luck — <u>amy.luck@students.plymouth.ac.uk</u>

Our Supervisor
Caroline Floccia – <u>caroline.floccia@plymouth.ac.uk</u>

Thank you for giving up your time to participate your child in the study.

Babylab, School of Psychology University of Plymouth Drake Circus Plymouth PL3 5UD

Telephone: 01752-233157

Appendix E: Counterbalanced score sheets

		Marine Street			WS.I		A	Word Match	В	Answer	SW
	PeeLAR	Bee LAR	BeeLAR		2000		TUshow	PUshow	PUshow	35701	00-00
1	M	0	P	В	WS	1	M	0	P	В	SW
2	PUshow	TUshow	TUshow	В	SW	2	PeeLAR	BeeLAR	Bee <u>LAR</u>	В	ws
_	GAWjee	GAWjee	DAWjee			-	BoSAR	PoSAR	PoSAR	-	***
3	0	M	P	A	SW	3	P	0	M	В	WS
4	BoSAR	PoSAR M	PoSAR O	В	ws	4	GAW)ee	GAWjee	DAWjee M	A	SW
900	PoNUT	BoNUT	BoNUT		0.000	1000	KOmess	KOmess	Tomess	1000	0.000
5	M	0	Р	В	WS	5	0	M	P	Α	SW
6	KOmess	KOmess	TOmess M	А	SW	6	PoNUT	Bo <u>NUT</u>	Bo <u>NUT</u>	В	ws
	DooBEY	DooBEY	GooBEY				GEEpow	GEEpow	KEEpow		-
7	M	0	P	A	WS	7	M	0	Р	A	SW
B	GEEpow M	GEEpow	KEEpow	A	SW	8	Doo <u>BEY</u>	Doo BEY	Goo <u>BEY</u>	A	WS
	J.m.	P. Comments	10	-	_		110	17			
FAN	7.3				WSF	INCAN	T.A				uue
	Α	World March	B	Assess	SW		Ä.	Whine Musely	8	Answer	SW
,	PoNUT	Po <u>NUT</u>	BoNUT	Д	ws	1	Goo BEY	GooBEY	DooBEY	A	ws
	PoSAR	PoSAR	M BoSAR	Hose	C/0/8/6		PoNUT	PoNUT	M Bo NUT	0.55	70556
2	Р	M	0	А	WS	2	P	M	0	А	WS
3	DAW)ee	GAW)ee	GAW)ee	В	SW	3	GEE pow	KEEpow O	KEEpow M	В	SW
	KEEpow	KEEpow	M GEEpow				DAWjee	GAWjee	GAWjee		
1	0	P	M	Α	SW	4	P	M	0	В	SW
5	PeeLAR D	PeeLAR M	BeeLAR P	A	ws	5	PoSAR M	BoSAR	Bo <u>SAR</u>	В	ws
	Tomess	KOmess	KOmess	15900	19920	2000	PeeLAR	PeeLAR	BeeLAR	7000	-70306
•	M	P	0	В	SW	6	0	P	M	А	WS
	Goo <u>BEY</u>	Doo <u>BEY</u>	Doo <u>BEY</u>	В	ws	7	TOmess	KOmess O	KOmess M	В	SW
	PUshow	TUshow	TUshow				PUshow	PUshow	TUshow		
3	D	M	-	В	SW	8	-	410	-	A	SW
_	P	W	0		244		M	P	0	1	-
-	11	M	10		244	4	IM.	P	0	1	-
VAR	1000				WS7	ness.	700	P	1.0		WS
_	Α	Word Match	8	Answer	WS7 SW	4	Д	Word Match	В	Answer	WS
1	A Daw JEE M	Word Match Gaw JEE	B Gaw JEE P		WS7	4	700	Word Match TuSHOW	1.0		WS
1	A DawJEE M GeePOW	Word Match Gaw JEE	B GawJEE P KeePOW	Answer	WS7 SW	1	Tu <u>SHOW</u> P Daw <u>JEE</u>	Tu SHOW O Gaw JEE	B PuSHOW M GawJEE	Answer A	WS
1	A DawJEE M GeePOW M	Word Match Gaw JEE	B GawJEE P KeePOW	Answer B	ws/ sw ws	BEAD	A TuSHOW P DawJEE M	Tu <u>SHOW</u> O Gaw JEE P	B PuSHOW M GawJEE	Answer	WS
1	A DawJEE M GeePOW	Word Match Gaw JEE O KeePOW P POnut M	B GawJEE P KeePOW	Answer B	WS 7 SW WS	1	Tu <u>SHOW</u> P Daw <u>JEE</u>	Tu SHOW O Gaw JEE	B PuSHOW M GawJEE	Answer A	ws sw ws
1 2	A DawJEE M GeePOW M POnut O DOObey	Word Match GawJEE O KeePOW P POnut M	B GawJEE P KeePOW O BOnut P GOObey	Answer B B	ws/ sw ws	1 2 3	TuSHOW P DawJEE M GOObey	TuSHOW O GawJEE P GOObey	B PuSHOW M GawJEE O DOObey P	Answer A B A	WS SW WS
1	A DawJEE M GeePOW M POnut O DOObey P	Word Match GawJEE O KeePOW P Onut M GOObey M	BOnut P	Answer B	WS / SW WS SW	1 2	A TuSHOW P DawJEE M GOObey O POnut O	TuSHOW O GawJEE P GOObey M POnut P	B PuSHOW M GawJEE O DOObey P BOnut M	Answer A B	WS SW WS
1 2 3 4	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P	Answer B B	WS / SW WS SW	1 2 3	A TuSHOW P DawJEE M GOObey O POnut	Tu <u>SHOW</u> O Gaw <u>JEE</u> P GOObey M	B PuSHOW M GawJEE O DOObey P	Answer A B A	WS SW WS SW SW
1 2	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O BOSEF	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M Bosar	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar	Answer B B A	WS / SW WS SW SW	1 2 3 4 5	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M POsar	TuSHOW O GawJEE P GOObey M POnut P KoMESS	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR	Answer A B A A B	WS SW WS SW SW
1 2 3 4 5 5	A Daw_JEE M GeePOW M POnut O DOObey P PusHOW O BOsar O	Word Match Gaw JEE O Kee POW P POnut M GOODey M Pushow M BOsar P	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M	Answer B B A A A	WS / SW WS SW WS SW SW	1 2 3 4	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M POsar M	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAR	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O	Answer A B A	WS SW WS SW SW
1 2 3	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O PEElar M	Word Metch GawJEE O KeePOW P POnut M GOObey M Pushow M BOsar P PEElar O	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P	Answer B B B A	WS / SW WS SW SW WS	1 2 3 4 5	A TuSHOW P DawJEE M GOObey O ToMESS M POsar M KeePOW P	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M	Answer A B A A B	WS
1 2 3 4 5 5	A DawJEE M GeePOW M POnut O DOObey P PusHOW O PEElar	Word Metch Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P PEElar O KoMESS	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS	Answer B B A A A	WS / SW WS SW WS SW SW	1 2 3 4 5 6 7	A TuSHOW P DawJEE M GOObey O ToMESS M POsar M KeePOW P PEElar	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAR P GecPOW	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEEIAR	Answer A B A A B B B B	ws ws ws sw sw ws
1 2 3 5 5 7	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O PEElar M	Word Metch GawJEE O KeePOW P POnut M GOObey M Pushow M BOsar P PEElar O	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P	Answer B B A A A A	WS 1 SW WS SW SW SW SW SW	1 2 3 4 5 6 7 8	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M ReePOW P PEElar M	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M	Answer A B A A B B B	ws ws ws sw sw ws
1 2 3 4 5 5 7 3	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O PEElar M	Word Metch Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P PEElar O KoMESS	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS	Answer B B A A A A	WST SW WS WS SW SW WS SW SW WS	1 2 3 4 5 6 7	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M ReePOW P PEElar M	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEEIAR	Answer A B A A B B B B	WS SW WS SW WS SW SW SW SW
1 2 3 4 5 5 7 3	A DawJEE M GeePOW M POnut O DOObey P PusHOW O EDOSar O PEElar M ToMESS P	Word Match Gaw JEE O Kee POW P POnut M GOObey M PuSHOW M BOSAT P PEElar O KoMESS M Word Match	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS	Answer B B A A A A	WS 1 SW WS SW SW SW SW SW	1 2 3 4 5 6 7 8	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M ReePOW P PEElar M	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O PEElar P	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEEElar O	Answer A B A A B B B B	WS SW WS SW WS SW SW SW SW
3 3 5 5 7 3	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O PEElar M ToMESS P	Word Match Gaw JEE O Kee POW P POnut M GOObey M PuSHOW M BOSAT P PEElar O KoMESS M Word Match Bee LAR	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O	Answer B B A A B A A A A A	WS / SW WS SW SW SW WS SW WS SW WS	1 2 3 4 5 6 7 8	A TuSHOW P DawJEE M GOObey POnut O ToMESS M KeePOW P PEElar M DooBEY	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O PEElar P	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEEIAR O	Answer A B A A B B A A A B A A A A A A A B A A A B B A	WS SW WS SW WS SW WS SW WS SW
3 3 5 5 7 3	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O PEElar M ToMESS P	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P EElar O KoMESS M Word Match Bee_LAR O	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O	Answer B B A B A A A A B	WS / SW WS SW WS SW WS SW WS SW WS	1 2 3 4 5 6 7 8 DYAL	A TuSHOW P DawJEE M GOObey O ToMESS M POsar M KeePOW P PEElar M DooBEY M	TuSHOW O GawJEE P GOODBBY M POnut P KoMESS O BOSAT P GeePOW O Vord Match GoobEY O	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEElar O GooBEY P	Answer A B A A B B A A B B B B B A	WS SWW WS SWW SWW SWW SWW SWW SWW SWW S
1 2 3 4 5 5 7 7 3 1	A Daw_JEE M GeePOW M POnut O DOObey P PuSHOW O BOSAT O PEElar M ToMESS P BeeLAR P DooBEY M	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P PElar O KoMESS M Word Match Bee LAR O Goobey P Goobey	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O	Answer B B A A B A A A A A	WS / SW WS SW SW SW WS SW WS SW WS	1 2 3 4 5 6 7 8 8 COTAN	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M KeePOW P PEElar M DooBEY M BoNUT	TuSHOW O GawJEE P GOODBBY M POnut P KoMESS O BOSAT P GeePOW O PEElar P Word Match GooBEY O PoNUT O	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAT O GeePOW M BEEIAT O GOOBEY P PONUT P	Answer A B A A B B B A	WS SWW WS SWW SWW SWW SWW SWW SWW SWW S
1 2 3 4 5 5 7 7 3 1 1 2	A DawJEE M GeePOW M POnut O DOObey P PuSHOW O PEElar M ToMESS P BeeLAR P DooBEY	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M Bosar P PEElar O KoMESS M Word Match Bee LAR O Goobey Tushow	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O B PeeLAR M GooBEY O Pushow	Answer B B A B A A B A B A B B	WS / SW WS S	1 2 3 4 5 6 7 8 8 90 A 1 2	A TuSHOW P DawJEE M GOODBBY O POnut O ToMESS M POSAT M KeePOW P PEEIAT M DooBEY M BoNUT	TuSHOW O GawJEE P GOODBBY M POnut P KoMESS O BOSAR P GeePOW O PEElar P Word Match GooBEY O PoNUT O PoSAR	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeoPOW M BEElar O B GooBEY P PoNUT P BoSAR	Answer A B A A B B B B B B B B B B B B B B B	WS SW
1 2 3 4 5 5 7 7 3 1 1 2	A Daw_JEE M GeePOW M POnut O DOObey P PusHoW O BOSAR O PEElar M ToMESS P DooBEY M TUshow O	Word Match GawJEE O KeePOW P POnut M GOObey M PuSHOW M BOSAP P EElar O KoMESS M Word Match BeeLAR O GooBEY P TUSHOW M	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POSAT M BEEIAT P KoMESS O B PeeLAR M GooBEY O Pushow P	Answer B B A B A A A A B	WS / SW WS SW WS SW WS SW WS SW WS	1 2 3 4 5 6 7 8 8 DEATH	A TuSHOW P DawJEE M GOObey POnut O ToMESS M KeePOW P PEElar M DooBEY M BoNUT M POSAR O	TuSHOW O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O PEElar P Word Match GooBEY O PONUT O PoSAR M	B PuSHOW M GawJEE O DOObey P BOnut KoMESS P BOSAR O GeePOW M BEEIAR O GooBEY P PONUT P BOSAR P	Answer A B A A B B A B B A A Answer B B A	WS SW
1 2 3 4 5 7	A Daw_JEE M GeePOW M POnut O DOObey P PuSHOW O BOSAT O PEElar M ToMESS P BeeLAR P DooBEY M	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P PEElar O KoMESS M Word Match Bee LAR O GooBEY P TUshow M TOmess M	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O B PeeLAR M GooBEY O Pushow P TOmess O	Answer B B A B A A B A B A B B	WS / SW WS S	1 2 3 4 5 6 7 8 8 90 A 1 2	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M KeePOW P PEElar M DooBEY M BoNUT	TuSHOW O GawJEE P GOODBBY M POnut P KoMESS O BOSAR P GeePOW O PEElar P Word Match GooBEY O PoNUT O PoSAR	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeoPOW M BEElar O B GooBEY P PoNUT P BoSAR	Answer A B A A B B B B B B B B B B B B B B B	WS SW
11 22 33 34 44 55 56 57 77 33 33 34 44	A Daw_JEE M GeePOW M POnut O DOObey P PusHOW O BOSAT O PEElar M ToMESS P DooBEY M TUshow O KOmess P BoNUT	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P PEElar O KoMESS M Word Match Bee LAR O GooBEY P TUshow M M BONUT	B GawJEE P ReePOW O BOnut P GOObey O TUSHOW P POsar M BEElar P KoMESS O PeeLAR M GooBEY O Pushow P TOmess O PoNUT	Answer B B A B A A B A A B A B A B A B	WS / SW WS SW WS SW WS SW WS SW SW SW SW SW	1 2 3 4 5 6 7 8 8 DYAN	A TuSHOW P DawJEE M GOObey POnut O ToMESS M KeePOW P PEElar M DooBEY M BoNUT M POSAR O	Tushow O GawJEE P GOODBBY M POnut P GOOBBS GEEPOW O PEElar P Word Match GOOBEY O PONUT O POSAR M TOmess P DAWjee	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEElar O BOOBEY P PONUT P BOSAR P CO BOSAR P CO BOSAR P CO BOSAR P CO BOSAR	Answer A B A A B B B B A A A A A A A A A A A	WS SW
1 2 2 3 3 3 3 3 3 3 4 4	A Daw_JEE M GeePOW M POnut O DOObey P PuSHOW O BOSAT O PEEIAT M ToMESS P DooBEY M TUSHOW O KOmess P	Word Motch GawJEE O KeePOW P POnut M GOODey M PuSHOW M BOSAT P PEEIAT O KoMESS M Word Motch BeeLAR O GooBEY P TUshow M TOmess M BONUT M	B GawJEE P KeePOW O BOnut P GOObey O TUSHOW P POsar M BEElar P KoMESS O B PeeLAR M GooBEY O Pushow P TOmess O O DONUT P	Answer B B A B A A B A B A A B	WS / SW WS S	1 2 3 4 5 6 7 8 8 DEATH	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M KeePOW P PEElar M DooBEY M BoNUT M PoSAR O TOMESS O DAWjee	TuSHOW O GawJEE P GOODBBY M POnut P KoMESS O BOSAR P GeePOW O PEElar P Word Match GooBEY O PoNUT O PoSAR M TOmess P DAW iee M	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEEIAR O BOSAR P PONUT P BOSAR P BOSAR P KOMESS M GAWjee P	Answer A B A A B B A B B A A Answer B B A	WS SW
1 2 3 4 5 5 7 8 3 2 3 3	A Daw_JEE M GeePOW M POnut O DOObey P PusHOW O BOSAT O PEElar M ToMESS P DooBEY M TUshow O KOmess P BoNUT	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P PEElar O KoMESS M Word Match Bee LAR O GooBEY P TUshow M M BONUT	B GawJEE P ReePOW O BOnut P GOObey O TUSHOW P POsar M BEElar P KoMESS O PeeLAR M GooBEY O Pushow P TOmess O PoNUT	Answer B B A B A A B A A B A B A B A B	WS / SW WS SW WS SW WS SW WS SW SW SW SW SW	1 2 3 4 5 6 7 8 8 DYAN	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M POsar M KeePOW P PEElar M DooBEY M BoNUT M PoSAR O TOmess	Tushow O GawJEE P GOODBBY M POnut P GOOBBS GEEPOW O PEElar P Word Match GOOBEY O PONUT O POSAR M TOmess P DAWjee	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEElar O BOOBEY P PONUT P BOSAR P CO BOSAR P CO BOSAR P CO BOSAR P CO BOSAR	Answer A B A A B B B B A A A A A A A A A A A	WS SW SW
11 12 2 3 3 3 3 3 3 3 5 5 5 6 6	A Daw_JEE M GeePOW M POnut O DOObey P PusHOW O BOSAT O PEElar M ToMESS P DooBEY M TUshow O KOMESS P BONUT O KEEPOW M GAWjee	Word Motch GawJEE O KeePOW P POnut M GOODey M PuSHOW M BOSAT P PEEIAT O KoMESS M Word Motch BeeLAR O GooBEY P TUshow M TOmess M BONUT M	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O BEELAR M GooBEY O Pushow P TOmess O DAWJee	Answer B B A B A A B A B A B A B A B A B B A B B A B B	WS / SW WS SW WS SW WS SW WS SW SW SW SW SW	1 2 3 4 5 6 7 8 57A 4 5 6 6	A TuSHOW P DawJEE M GOObey O POnut O ToMESS M KeePOW P PEElar M DooBEY M BoNUT M PoSAR O TOMESS O DAWjee	TuSHOW O GawJEE P GOODBBY M POnut P KoMESS O BOSAR P GeePOW O PEElar P Word Match GooBEY O PoNUT O PoSAR M TOmess P DAWjee M Pec_AR	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEElar O GooBEY P PoNUT P BoSAR P KOMESS M GAWjee P TUShow	Answer A B A A B B B A A Answer B B A A B B B B A B B B B A B B B B B	WS SW
11 22 33 34 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	A DawJEE M GeePOW M DOObey P POnut O DOObey P PuSHOW O PEElar M ToMESS P DooBEY M TUSHOW O KOmess P BoNUT O KEEpow M	Word Match Gaw JEE O Kee POW P POnut M GOObey M Pushow M BOsar P EElar O KoMESS M Word Match Bee LAR O Goobey Tushow M Tomess M BONUT M GEEpow P	B GawJEE P KeePOW O BOnut P GOObey O TuSHOW P POsar M BEElar P KoMESS O B PeeLAR M GooBEY O Pushow P TOmess O PoNUT P GEEpow O	Answer B B A B A A B A B A B A B A A B A A B A A B A A B A A B A	WS 1 SW WS S	1 2 3 4 5 6 7 8 SYAN	A TuSHOW P DawJEE M GOObey POnut O ToMESS M KeePOW P PEElar M BoNUT M BoNUT M BoNUT M TOMESS O DAWjee O BeeLAR M	Tushow O GawJEE P GOObey M POnut P KoMESS O BOSAT P GeePOW O PEElar P Word Match GooBEY O PoNUT O PoSAR M TOmess P DAWjee M PeeLAR P	B PuSHOW M GawJEE O DOObey P BOnut M KoMESS P BOSAR O GeePOW M BEElar O GooBEY P PoNUT P BoSAR P KOMESS M GAWjee P PeeLAR O	Answer A B A A B B B A A A A A A A A A A	ws sw ws sw sw sw

	Α.	Word Match	В	Answer	WS .
1	To <u>MESS</u>	To <u>MESS</u>	KoMESS M	Α	ws
2	Tu SHOW	Tu SHOW M	Pu SHOW O	Α	ws
3	BOnut P	POnut O	POnut M	В	SW
4	GeePOW P	KeePOW M	KeePOW O	В	WS
5	BOsar O	BOsar M	POsar P	А	SW
6	GOObey M	DOO bey	DOObey O	В	SW
7	BEElar P	PEElar O	PEElar M	В	SW
8	Daw JEE M	Daw JEE	Gaw JEE O	А	WS

	W	Wood Metch	8.	Answer	WS
1	POsar P	POsar O	BOsar M	A	SW
2	To <u>MESS</u>	To <u>MESS</u>	Ko <u>MESS</u>	А	ws
3	DOO bey	GOObey O	GOObey M	В	SW
4	BOnut P	POnut M	POnut O	В	sw
5	KeePOW M	Gee POW	Gee POW	В	WS
6	Pu SHOW O	Pu SHOW P	Tu <u>SHOW</u> M	Α	ws
7	DawJEE M	Daw JEE	Gaw JEE P	A	ws
8	BEElar P	PEElar M	PEElar O	В	SW

	A	Word Match	В	Answer	SW
1	BOsar M	POsar O	POsar P	В	SW
2	Gaw JEE P	Gaw JEE M	Daw JEE O	А	ws
3	PEElar P	BEElar O	BEElar M	В	SW
4	Pu SHOW	Tu <u>SHOW</u> M	Tu SHOW O	В	ws
5	DOObey O	DOObey M	GOObey P	A	SW
6	Gee POW	GeePOW P	KeePOW M	Δ	ws
7	POnut P	BOnut O	BOnut M	В	SW
8	Ko <u>MESS</u> M	KoMESS P	To <u>MESS</u>	A	ws

1	Gaw JEE	Gaw JEE	Daw <u>JEE</u> M	A	ws
2	BOsar M	POsar P	POsar O	В	SW
3	Pu SHOW	Tu SHOW	Tu <u>SHOW</u> M	В	ws
4	PEE ar	BEE ar	BEElar O	В	SW
5	Gee POW	Gee <u>POW</u> M	Kee <u>POW</u>	Α	ws
6	DOO bey	DOO bey	GOObey M	A	SW
7	Ko <u>MESS</u>	Ko <u>MESS</u>	To <u>MESS</u>	Α	ws
8	POnut	BOnut M	BOnut O	В	SW

	A	Match	8	Annwer	SW
1	Ko <u>MESS</u> M	To <u>MESS</u>	To <u>MESS</u>	8	WS
2	GOObey P	GOObey M	DOO bey	А	SW
3	Kee POW	KeePOW M	Gee POW	A	WS
4	BEElar O	BEElar P	PEElar M	Α	SW
5	Tu <u>SHOW</u> M	Pu SHOW	Pu SHOW	В	ws
6	Gaw JEE M	Daw JEE	Daw JEE O	В	WS
7	POsar P	BOsar O	BOsar M	В	SW
8	BOnut M	BOnut P	POnut O	A	SW

	Α	Word Match	В	Answer	WS
1	BoNUT M	Po <u>NUT</u>	PoNUT P	8	ws
2	KEE pow	KEEpow M	GEEpow O	Α	SW
3	TOmess O	TOmess M	KOmess P	A	SW
4	Goo BEY O	Goo BEY	Doo BEY	A	ws
5	BeeLAR M	PeeLAR O	PeeLAR P	В	ws
6	DAWjee O	DAWjee P	GAWjee M	А	SW
7	TUshow P	PUshow O	PUshow M	8	SW
8	PoSAR P	BoSAR M	Bo SAR O	В	ws

	A	Word Match	В	Answer	SW
1	GEEpow M	KEEpow O	KEEpow P	B	SW
2	Bee <u>LAR</u> P	Bee <u>LAR</u> M	PeeLAR O	А	ws
3	KOmess P	TOmess O	TOmess M	В	SW
4	TUshow	<u>TU</u> show	<u>PU</u> show M	A	SW
5	Goo BEY M	Doo BEY	Doo BEY	В	ws
6	Bo NUT O	Bo <u>NUT</u> P	Po <u>NUT</u> M	А	WS
7	Bo <u>SAR</u> M	Bo <u>SAR</u> O	Po <u>SAR</u>	А	ws
8	GAW)ee	DAWjee M	DAWjee O	В	SW

	A	Word Match	В	Answer	WS / SW
1	KeePOW P	Kee <u>POW</u>	Gee <u>POW</u>	A	WS
2	Ko <u>MESS</u> M	ToMESS P	To <u>MESS</u>	В	ws
3	BEElar O	BEE ar	PEElar P	A	SW
4	POsar O	POsar P	BOsar M	A	SW
5	Gaw JEE M	Daw JEE	Daw JEE	В	ws
6	Tu SHOW M	Pu SHOW	Pu SHOW O	В	WS
7	BOnut M	BOnut O	POnut P	A	SW
8	GOObey P	DOObey M	DOObey o	В	SW

		Word Alteren		Answer	
5	PeeLAR M	BeeLAR O	Bee <u>LAR</u> P	В	ws
6	PUshow M	TUshow	TUshow O	В	SW
7	GAWjee	GAWjee M	DAWjee P	A	SW
8	Bo <u>SAR</u>	PoSAR M	Po SAR O	В	ws
1	PoNUT M	Bo NUT	Bo NUT	В	ws
2	KOmess O	KOmess P	TOmess M	А	SW
3	Doo <u>BEY</u> M	Doo <u>BEY</u>	Goo BEY	A	ws
4	GEEpow M	GEEpow P	KEEpow O	Α	SW

	А	Word Match	В	Answer	WS .
5	TUshow M	PUshow O	PUshow P	В	SW
6	PeeLAR M	BeeLAR P	BeeLAR O	В	WS
7	BoSAR P	Po <u>SAR</u> O	PoSAR M	В	ws
В	GAWjee	GAW)ee	DAWjee M	А	SW
1	KOmess O	KOmess M	TOmess P	A	SW
2	Po <u>NUT</u> M	Bo NUT	Bo <u>NUT</u> O	В	ws
3	GEEpow M	GEEpow O	KEEpow P	A	SW
4	Doo <u>BEY</u> M	Doo BEY	Goo BEY	A	ws

	A	Worlf Match	n	Annual	SW
5	Po <u>NUT</u> P	Po NUT	Bo NUT M	A	ws
6	PoSAR P	PoSAR M	Bo <u>SAR</u>	А	ws
7	DAWjee	GAW)ee	GAWjee M	В	SW
8	KEEpow	KEEpow	GEEpow M	А	SW
1	PeeLAR O	PeeLAR M	BeeLAR P	А	ws
2	TOmess M	KOmess P	KOmess O	В	SW
3	Goo BEY	Doo <u>BEY</u>	Doo BEY M	В	ws
4	PUshow P	TUshow M	TUshow	В	SW

Pat	12				WS
	A	Wastel Shatch	B	Answer	SW
5	Goo BEY	Goo BEY	Doo <u>BEY</u> M	Д	ws
6	Po <u>NUT</u>	Po <u>NUT</u> M	Bo NUT O	А	ws
7	GEEpow	KEEpow	KEEpow M	В	SW
8	DAWjee	GAWjee M	GAWjee O	в	SW
1	PoSAR M	Bo SAR	BoSAR P	В	ws
2	PeeLAR O	PeeLAR P	BeeLAR M	Д	ws
3	TOmess P	KOmess O	KOmess M	В	SW
4	PUshow M	PUshow	TUshow	Α	SW

	A	Word Match	8	Answer	WS
5	Daw JEE M	Gaw JEE O	Gaw JEE P	В	WS
6	Gee <u>POW</u> M	KeePOW P	Kee <u>POW</u>	В	ws
7	POnut O	POnut M	BOnut P	Α	SW
8	DOObey P	GOObey M	GOO O	В	SW
1	Pu SHOW	Pu SHOW M	Tu SHOW	A	ws
2	BOsar O	BOsar P	POsar M	А	SW
3	PEElar M	PEElar O	BEElar P	A	SW
4	ToMESS	Ko <u>MESS</u>	Ko <u>MESS</u>	В	ws

ī	A	Word Match	В	Answer	SW
5	Tu <u>SHOW</u>	Tu SHOW	Pu SHOW M	А	ws
6	DawJEE M	Gaw JEE P	Gaw JEE O	В	WS
7	GOObey O	GOObey M	DOObey P	А	SW
8	POnut O	POnut P	BOnut M	A	SW
1	To <u>MESS</u>	Ko <u>MESS</u>	KoMESS P	В	WS
2	POsar M	BOsar P	BOsar O	В	SW
3	KeePOW P	Gee POW O	GeePOW M	В	ws
4	PEElar M	PEElar P	BEElar O	А	SW

ī	A	Word Match	В	Answer	SW
5	BeeLAR P	Bee <u>LAR</u> O	PeeLAR M	Α	ws
6	Doo BEY M	Goo BEY P	Goo BEY O	В	ws
7	TUshow O	TUshow M	Pushow P	A	SW
8	KOmess P	TOmess M	TOmess O	В	SW
1	Bo NUT	Bo <u>NUT</u> M	PoNUT P	A	ws
2	KEEpow M	GEEpow P	GEEpow O	В	SW
3	GAW)ee	DAWjee O	DAWjee M	В	SW
4	Bo <u>SAR</u> M	Bo <u>SAR</u>	Posar O	A	ws

	A	Word Match	В	Answer	WS/SW
5	Doo <u>BEY</u>	Goo BEY	Goo <u>BEY</u>	В	ws
6	BoNUT M	Po <u>NUT</u>	Po NUT	В	ws
7	PoSAR O	Po <u>SAR</u> M	Bo SAR P	A	ws
8	TOmess O	TOmess P	KOmess M	А	SW
1	DAWjee O	DAWjee M	GAWjee	A	SW
2	BeeLAR M	PeeLAR P	PeeLAR O	В	ws
3	PUshow M	PUshow	TUshow P	А	SW
4	KEEpow P	GEEpow M	GEEpow O	В	SW

H. F.	A A	Word Match	В	Answer	WS /
5	To <u>MESS</u>	To <u>MESS</u>	Ko <u>MESS</u> M	Α	ws
6	Tu SHOW	Tu SHOW	Pu SHOW O	Α	ws
7	BOnut P	POnut O	POnut M	В	SW
8	Gee POW P	KeePOW M	Kee POW	В	ws
1	BOsar O	BOsar M	POsar P	A	SW
2	GOObey M	DOObey P	DOObey O	В	SW
3	BEElar P	PEElar O	PEElar M	В	SW
4	Daw JEE M	Daw JEE	Gaw JEE O	A	ws

	-A	World Match	8	Answer	SW
5	POsar P	POsar O	BOsar M	A	SW
6	To <u>MESS</u>	To <u>MESS</u> M	Ko <u>MESS</u>	Α	ws
7	DOObey P	GOObey O	GOObey M	В	SW
8	BOnut P	POnut M	POnut O	В	SW
1	KeePOW M	GeePOW O	Gee POW	В	ws
2	Pu SHOW O	Pu SHOW P	Tu <u>SHOW</u> M	Α	ws
3	Daw JEE M	Daw JEE O	Gaw JEE P	Α	ws
4	BEElar P	PEElar M	PEElar O	В	SW

BEWIN

	Д	Word Match	В	Answer	WS
5	BOsar M	POsar O	POsar P	В	SW
6	Gaw <u>JEE</u>	Gaw <u>JEE</u> M	Daw JEE O	А	WS
7	PEElar P	BEElar O	BEElar M	В	sw
8	Pu SHOW	Tu <u>SHOW</u> M	Tu SHOW	В	WS
1	DOObey O	DOObey M	GOObey P	А	SW
2	GeePOW O	GeePOW P	KeePOW M	А	WS
3	POnut	BOnut O	BOnut M	В	SW
4	KoMESS M	KoMESS P	ToMESS O	А	ws

Appendix G: Practice trial photographs



Figure 3: Practice trial 1 objects, as viewed from the experimenters perspective.

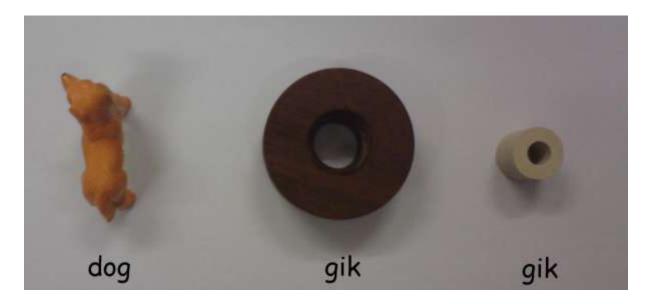


Figure 4: Practice trial 2 objects, as viewed from the experimenters perspective.

Appendix H: Actual trial photographs



Figure 5: Triad 1 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.



Figure 6: Triad 2 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.



Figure 7: Triad 3 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.

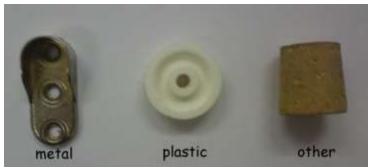


Figure 8: Triad 4 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.

Appendix H: Actual trial photographs (continued)

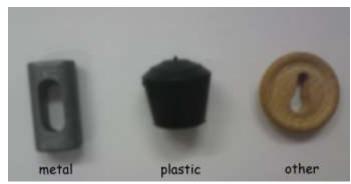


Figure 9: Triad 5 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.

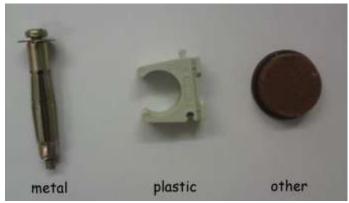


Figure 10: Triad 6 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.

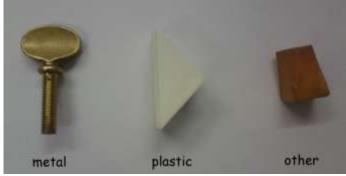


Figure 11: Triad 7 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.



Figure 12: Triad 8 of objects, as viewed from the experimenters perspective, including description of the object that was metal, plastic and other material.

Appendix I: Confirmation letter

Babylab
School of Psychology
The University of Plymouth
Drake Circus
Plymouth
PL4 8AA

Telephone Number: 01752-223153

Website: www.plymouthbabylab.org

Wednesday 5th November 2008

Dear (name of parent)

Re: 25 month word learning study

We are two final year students who are working within the Babylab at The University of Plymouth. We recently contacted you by telephone, regarding a study concerning how children learn new words. We would like to take this opportunity to thank you and your child (insert child's name) for agreeing to participate in this study.

The study will consist of (insert child's name) participating in a simple task, where (he/she) will be asked to identify a specific object that matches a word already spoken by the experimenter. Throughout this task, you will be with (insert child's name) at all times.

In addition, we would require you to fill out a questionnaire prior to the study, which would show us how developed (insert child's name) vocabulary is.

We would like to inform you that if you change your mind and decide that you do not want (insert child's name) to participate, then this is absolutely fine and can be done without question.

Furthermore, the Babylab is able to offer £3.00p, which would contribute towards your travel expenses.

Below is confirmation of the date and time that we agreed on the phone.

Date (insert date)	Time	(insert time)
--------------------	------	---------------

If the above date and time is no longer suitable, or you have any questions regarding the study, please feel free to contact us on the e-mails or phone numbers below.

Victoria Farley	victoria.farley@students.plymouth.ac.uk	07917-035891
Amy Luck	amy.luck@students.plymouth.ac.uk	07792-208676

Please find enclosed directions of how to find the Babylab, a Babylab information leaflet and the Communicative Development Inventory (CDI) questionnaire (which will need to be returned to the Babylab when you attend the study).

We look forward to meeting you at the Babylab.

Yours sincerely,

Victoria Farley and Amy Luck

Six scripted phrases

"Look at the (object name)." (Experimenter One showed the infant the object).

"This is a (object name)." (Experimenter One showed the infant the object).

"Would you like to play with the (object name)?" (Experiment One gave the infant the object).

"I like the (object name)." (Experimenter One allowed the infant to explore the object).

"Can I have the (object name) back please?" (Experimenter One placed their hand out to receive the object).

"I'm going to place the (object name) right here on the table." (Experimenter One placed the object in a particular place on the table).

Appendix K: CD-ROM containing Excel spreadsheets and SPSS analysis

This CD-ROM contains the following information:

- Excel spreadsheet for the present study.
- Excel spreadsheet for the 20-month-old infants word-initial consonant contrast experiment carried out by De'Ath, Prior and Dewing.
- Excel spreadsheet for the 23-month-old infants word-medial consonant contrast experiment carried out by Seward and Denton.
- SPSS analysis for the present study.
- SPSS comparison analysis between the present study and the 20-month-old infants word-initial consonant contrast experiment carried out by De'Ath, Prior and Dewing.
- SPSS comparison analysis between the present study and the 23-month-old infants word-medial consonant contrast experiment carried out by Seward and Denton.