

Supplemental Table 1

Participant 1: Novel Words by Word Type

	Procedural Discourse Set 1			Procedural Discourse Set 2			Personal Recounts		
Word Type	Highest Baseline	Last Baseline	End of 1 st Tx Condition	Highest Baseline	Last Baseline	End of 2 nd Tx Condition	Highest Baseline	Last Baseline	End of 3 rd Tx Condition
Noun	41	20	32	48	21	46	38	26	39
Verb	27	20	21	28	22	27	33	15	20
Adjective	19	9	16	13	7	13	12	13	15
Adverb	9	8	8	11	7	9	9	8	9
Preposition	8	3	6	5	2	7	9	6	11
Conjunction	0	0	0	3	2	2	5	1	4
Interjection	0	0	0	0	0	0	0	0	0
Contraction	0	2	2	0	2	2	1	1	4
Infinitive	4	3	2	3	2	5	7	4	4
TOTAL	108	65	87	111	65	111	114	74	106

Supplemental Table 2

Participant 2: Novel Words by Word Type

Personal Recount				Procedural Discourse Set 1		
Word Type	Highest Baseline	Last Baseline	End of 1 st Tx Condition	*2 nd Highest Baseline	Last (Highest) Baseline	End of 2 nd Tx Condition
Noun	60	40	44	141	146	183
Verb	23	15	22	61	64	97
Adjective	26	16	15	42	47	67
Adverb	10	5	12	16	19	16
Preposition	7	3	6	8	10	14
Conjunction	2	2	1	3	3	2
Interjection	1	0	1	0	0	0
Contraction	1	1	1	2	1	1
Infinitive	3	0	3	2	4	8
TOTAL	133	82	105	275	294	388

Supplemental Table 3

Participant 3: Novel Words by Word Type

Procedural Discourse				Personal Recount		
Set 1						
Word Type	Highest Baseline	Last Baseline	End of 1 st Tx Condition	Highest Baseline	Last Baseline	End of 2 nd Tx Condition
Noun	86	91	118	70	53	72
Verb	57	44	54	33	18	28
Adjective	33	36	69	29	19	23
Adverb	17	15	17	8	7	9
Preposition	14	10	12	8	8	11
Conjunction	5	3	6	4	4	5
Interjection	0	0	0	0	0	0
Contraction	0	1	7	0	0	7
Infinitive	12	12	17	6	2	6
TOTAL	224	212	300	158	111	161

Supplemental Appendix A

Procedural Discourse Samples

Participant 1

Baseline – Tell me in detail how you would go about having a party.

I don't have any parties (cue) loud ones and bunch of music that's about all I know.

Post treatment – Tell me in detail how you would go about having a party.

uh xx pick uh xx right people that will be with you at the party then have a party that it won't be so noisy and that will be respectful with the people

Participant 2

Baseline – Tell me in detail how you would go about giving a talk

talk um go to the pay'by (probably) the the usually thum the xx the xx know the subject well I don't know but the or the um the topic the write down all the heals on notes here the fork and go to the computer the type everything here thum th-the printed here go to the um thum the go to the thum invitation or the church or thum xx talk and xx go to the um sit down the talk xx in a nice dress xx (C) xx nope

Post treatment – Tell me in detail how you would go about giving a talk

xx went to the computer the rechuch the research the topic the um I the um xx the type the rough draft first thum thum out pashe no outline first here thum go to the um thum the mirror my mirror the give my talk to myself the um call the two friends come to my apartment thum I the um I may the three copies myself and the my friends too thum I xx xx word xx xx the I'll xx leave my talk to my friends they always xx criticize me the um the slow down enunciate the the thum xx mumbling xx xx always but thum but thum I my friend my friend left I thum wash my hair dress here take a shower everything comb my hair dress xx dress up for the church or the audi word gym xx xx audi xx auditorium xx close xx thum I go drove to the um the church or the auditorium xx park the go to the um the place here I waiting for the x my time to speak the give the x talk again or the church the um the um the sit down drove back home yes (C) nope

Participant 3

Baseline – Tell me in detail how you would go about fixing a leaky faucet

xx um fixing a dripping faucet um my wife does all that kind of stuff um you gotta get under the sink to find the hole um and then find a hole um xx that's for a clog um make sure the water's off and then replace the sink I don't know idea have no idea (cue) no

Baseline – Tell me in detail how you would go about fixing a leaky faucet

um first of all under sneak under the sink um I need check there any loose fitting clamps or pipes and then after that I call Batley Plumbing in the yellow pages because Dark Mark's dad is a plumber and he doesn't charge me for the diagnostic fee he only charge me for the repair he does if he doesn't have the tools he'll wait a couple of days then he'll fix it for free all I gotta do is pay him for the parts (cue) uh-un

Supplemental Appendix B

Personal Recount Discourse Samples

Participant 1*Final Baseline*

In Korea it was large band and uh and this one boat wasn't boat was ship uh got off there and saw sensible and talked to enlisted some talk the of the majors to how we behave how we going to where we're going and how to act anyway they talk us to the mess hall in the xx twelve o'clock mo... in the morning and then on down to the ship and headed for Korea since we're in Korea it was about took about four hours no more than that about four hours and anyway it was late late in the morning we got there and they got us to point where they were going to unload us unload us on the xx pitch dark day pitch dark morning it was cold it was in December or December or September we got there and uh xx middle of the ship and they come and unload us off the ship and gave us and gave us some ri... rifles and no ammunition just rifles and we unloaded the ship off the side of it we went down a ladder and we xx xx on the ship there was unloaded to us then they told us to keep us xx they load us uh they get us unload us the ship was uh awful high awful wet and cold in November we got to it we jumped it we xx with xx about about they told us about eight feet of water if we fall out fall then that be too bad there'd be no way to get us (5 minutes)

End of Personal Recount Treatment

I always like to travel a lot and uh so my cars always in good shape had new tires but I had new new re-caps used to get 'em brand new from a from uh this fellow big enough for me and anyway I traveled through through uh all over Co... Colorado where every town and then to Arizona this when I was young eighteen or twenty something like that and me or xx me myself traveling by myself and then I uh we had lots of snow xx here more than this cause it's Colorado over there and uh we had uh I bet they have they had uh xx xx he's uh he's one of my best friends that lives in Colorado he uh he called my best buddy in Co... in Montana and he was asking how much snow they get and and he guess xx over this brother as I have it cut out for for him specialty up there in in yer in uh Aspen Colorado and they are play roa... in the ski resort and there's also this place place uh Veil xx I used to go I used to work there I xx cutting some xx xx we were cutting some xx through pair through pair through the resort there xx no Aspen Veil Veil and uh but I never did xx to make it it was all housing like this xx more xx more and uh I tell I got my my money that I kinda depended on for that summer the checks bounced there from uh all the way from uh Texas and they bounced back from the bank and anyway went back xx went to uh Veil to see if the contractor was there so we got there there was oh other people that worked there forty people there that were after their money too and they told us that they xx that they knows that and they knew about it (5 minutes)

Participant 2

Baseline

Um pro'ey th... the our um maid the x um our Holly our maid we we wen to the xx Stuttgart Germany but the um Holly came to our house the um the um the the all the um family family the... th... th... first xx we um my parents xx flew to the xx no flew to the uh no xx xx drove to the um Maryland to um thum New York to xx ship thum we won to the um thum one day with the St George hotel long time ago but the um xx one day here the next day we go to the um the um the darby here but the um xx same day with the president Johnson over all the um the ships xx deployed to the um Viet Nam War the they we xx we thought the uh the six days from the um cruise no no we flew to the um the the the um overnight with the fly xx flew to the um the states thum pick up the um our house is not ready because th... the you we the five days thum the cruise but we x put the my puppy xx zipper our black dachshund the fl... flew to the um Germany but thum we pro'ey the um for two months the um xx xx xx thum what the word thum um 'mall apartment until the fix the her xx their house the um the the what is the word the oh what's the word th... the xx hard cows the xx xx "D-E-S-T-A" street I have no idea but the um xx xx colonels general house but the we we'd the we we'd um xx the um xx two um two blocks fix her house the we our duh maid Amber the s... so funny xx said but the xx we she told xx she she told us about the the the um we the xx xx you have to go to the xx xx xx you will lef off the xx xx xx tae off for the um voat for the um the um the the xx what is the xx xx what is the word xx the president xx xx but the xx xx ch... ch... chenner chenners thum uh what is the word xx xx the we had a president right the um germ th... the censors xx place the we xx we xx off off for th... the visit with thum the vote xx xx not me I said well why xx xx xx mother I said um xx xx xx but the last time I vote the um the the Hitler the no xx xx xx no forget it xx all people the xx he is no man he is not xx man evil man xx xx oh really xx xx they Amber didn't vote anywhere again (laughs) oh well xx xx xx so funny we the but our xx house is the um the circle and the colonels and xx generals but the xx every day with the picket the um the the the the our um bus here the um Karey barracks the um pro'ey close (5 minutes)

End of Personal Recount Treatment

Yesterday xx Monday right yeah the um went to the um the get up early for the um the eight thirty in the x morning go to the um the xx the drive down to the Salt Lake Clinic for the um Doctor Dubeday Dubenay to um find my the forms to the um what x the word the thum xx every year they um the 'prove the doctor approve me to really handicap xx xx they she said um the he x uh drove to the doctor Dubeday the um I sign in the the xx xx what is the word um xx what is the word the the xx word xx xx the xx insurance people I don't know xx here the xx say I I told them I I know I have no um xx 'ppointment first I need the the doctor needs uh sign my the forms only the she said the xx direct me to the her um Doctor Dubenay's office the said the xx secretary said um oh xx she is uh off the xx she th... the woman the woman said the I'll take the forms for the tomorrow xx no no last time last year I gave you the forms the same forms the um six or seven days they xx my almost expired my the handicap um stickers I don't know but xx I'll said the drag me body into bed thum back to the sleep for three hours get up dress go to the your you thum Monday Tuesday went to the th... the same the xx xx get up I go to bed xx I go to bed three in the morning better xx before xx the four five but thum fine xx drag my body xx the bed xx ask th... the Paul xx ple... please call me the um eight fifteen xx the

morning xx dress xx xx dress here straight no breakfast hot chocolate or the cheerios the but the the I left my door again the doctor appointment again the um pro'ey the nine ten around the she said the the who was the xx around no Doctor Dubenay what is th... the walk around to the office the said xx the she is xx shock about xx the waiting xx him xx her the said oh the the I have the one patients xx before oh fine the pro'ey the uh ten o'clock th... the no sleep the I gave the um form to the the sister xx xx Doctor Dubenay here the sign xx I I need two copies xx myself and the my parents the said xx drove back to the um what is the redder road um xx xx xx oh the (5 minutes)

Participant 3

Baseline

Last week I went to uh um I went to St. George I went to a place called uh I can't remember what it's called but it down by Hurricane a lake down there called Hurricane um we spent all day there um um let's see we had um first of all had get the boat Shelia and Pat had the boat and uh our three families came my wife xx her family Shelia and Pat and Vanessa and George um um George and April have a birthday George's was Thursday April's was Friday the thirteen so it was a good time we had uh we got the boat and then um we had to line the boat um then we had lunch and then um we had um uh a knee board um a tube an inner tube and skis I did the knee board it was pretty fun and then um me and Jason did the inner tube that was kinda fun and then um Shelia got on uh combo ski and was skiing around for about ten fifteen minutes then Nat... Pat got in the boat out a boat and did the water ski and the knee board and then um then we had lunch we ate sandwiches and um uh we had ham turkey two tinda cheeses provolone and American had wheat bread.. white bread excuse me and then wheat bread for uh the girls and then uh we had plenty of water Capri suns for the kids and then after they a... ate lunch we all went out on the boat and April hasn't gone at all because wu wu ru ru was watching Susan so I stayed there to watch Susan it's pretty funny Susan's kinda funny in the water so but uh April's bask back is kinda hurtin so she couldn't do the the tube or anything but uh she went out on the boat she she she saw um Vanessa and the two girls swim on the tube um Vanessa got on the knee board in the tube George that's Vanessa's husband he did the knee board (5 minutes)

Personal Recount Treatment

It's been about a week and a half since I saw you last it snowed on Monday about eleven inches of snow on that day in South Jordan and uh Alpine got fourteen inches of snow so um uh I had to go do the snow blower and then um let's see here it it was Sunday it was Sunday when it snowed I did the whole church was cancelled because of the snow storm and then um on Monday um it wasn't snowing too bad but uh um um John Luck he's a a real doosey he wrecked his car the Dodge Durango so he's having his three kids that are Jason's age he doesn't even shovel his walks you know and so um so we have April took the three kids to school they're seven eight and nine and then um but um she was stuck in the in the snow and then we had to get some guy Bob Cane to um um uh tow the van so she could get out of it and then John Luck he didn't show his sa... show his face at all I said that's a jerk and then um let's see here then on I went to my kung fu class that's pretty okay then um I went to go see the doctor on Tuesday not the PT physical therapy for my shoulder and then I took Jason to his uh half hour before class his private lesson and then the class after that so about one and

a half hours and then um I went to del taco because it's um three taco's for a buck so I got six tacos with onions small fry and a drink It cost me five-nineteen oh five-o-nine um then I pick Jason up from karate and um my wife was gone all day long help Pat with a he runs a a he's a general contractor for a church and so she went to sman... Spanish Fork for the day and then I had to take the kids to karate class and then she got home at about six o'clock and the thing is um excuse me Chris called her she called from uh Kentucky because her husband is dying from he's got metastatic cancer in his brain all over his body and so she wanted to find out Chris wanted to find out um if uh the Huntsman Center um find out what's going on with that but um thing is uh she's gonna I mean (5 minutes)

Supplemental Appendix C

Procedural Discourse Items: Sets for Each Participant by Condition

Participant 1

Set 1 (Treated in Condition 1)

1. Tell me in detail how you would go about laying a cement pad
2. Tell me in detail how you would go about having a party
3. Tell me in detail how you would go about getting gas
4. Tell me in detail how you would go about making lemonade
5. Tell me in detail how you would go about buying a car
6. Tell me in detail how you would go about getting groceries
7. Tell me in detail how you would go about planting a tree
8. Tell me in detail how you would go about making the bed
9. Tell me in detail how you would go about shaving
10. Tell me in detail how you would go about making a tuna sandwich

Set 2 (Treated in Condition 2)

1. Tell me in detail how you would go about washing a car
2. Tell me in detail how you would go about fixing a dripping faucet
3. Tell me in detail how you would go about getting the oil changed
4. Tell me in detail how you would go about seeing a doctor
5. Tell me in detail how you would go about moving to a new house
6. Tell me in detail how you would go about putting up a fence
7. Tell me in detail how you would go about getting ready for church
8. Tell me in detail how you would go about fixing breakfast
9. Tell me in detail how you would go about doing the laundry
10. Tell me in detail how you would go about giving a talk

Participant 2

Set 1 (Treated in Condition 2)

1. Tell me in detail how you would go about getting gas
2. Tell me in detail how you would go about buying a car
3. Tell me in detail how you would go about fixing breakfast
4. Tell me in detail how you would go about washing a car
5. Tell me in detail how you would go about planting a tree
6. Tell me in detail how you would go about getting the oil changed
7. Tell me in detail how you would go about making the bed
8. Tell me in detail how you would go about giving a talk
9. Tell me in detail how you would go about making lemonade
10. Tell me in detail how you would go about fixing a dripping faucet

Set 2 (Untreated)

1. Tell me in detail how you would go about doing the laundry
2. Tell me in detail how you would go about getting groceries
3. Tell me in detail how you would go about having a party
4. Tell me in detail how you would go about getting ready for church
5. Tell me in detail how you would go about moving to a new house
6. Tell me in detail how you would go about putting up a fence
7. Tell me in detail how you would go about making a tuna sandwich
8. Tell me in detail how you would go about seeing the doctor
9. Tell me in detail how you would go about laying a cement pad
10. Tell me in detail how you would go about shaving

Participant 3

Set 1 (Treated in Condition1)

1. Tell me in detail how you would go about washing a car
2. Tell me in detail how you would go about fixing a dripping faucet
3. Tell me in detail how you would go about getting the oil changed
4. Tell me in detail how you would go about seeing the doctor
5. Tell me in detail how you would go about moving to a new house
6. Tell me in detail how you would go about putting up a fence
7. Tell me in detail how you would go about making lemonade
8. Tell me in detail how you would go about getting gas
9. Tell me in detail how you would go about doing the laundry
10. Tell me in detail how you would go about planting a tree

Set 2 (Untreated)

1. Tell me in detail how you would go about laying a cement pad
2. Tell me in detail how you would go about having a party
3. Tell me in detail how you would go about fixing breakfast
4. Tell me in detail how you would go about getting ready for church
5. Tell me in detail how you would go about buying a car
6. Tell me in detail how you would go about getting groceries
7. Tell me in detail how you would go about giving a talk
8. Tell me in detail how you would go about making the bed
9. Tell me in detail how you would go about shaving
10. Tell me in detail how you would go about making a tuna sandwich

Supplemental Appendix D

M-RET Protocol

Modified Response Elaboration Training (after Wambaugh & Martinez, 2000)

Step 1. Prompt the participant to provide a response.

Procedural Treatment: “Tell me in detail how you would go about....”

Personal Recount: “Tell me something about anything that you would like to talk about..”

A. Upon an appropriate response (any response that related to the request), go to Step 2

B. Upon an inappropriate or no response, verbally provide two response options and request a response (e.g. “You could say something like *I ate breakfast* or *went to church*”)

1) Upon an appropriate response, go to Step 2.

2) Upon an inappropriate or no response, provide a model and request a repetition (e.g., “Say *ate*].” or “Say *church*.”)

a. Upon an appropriate response, go to Step 2.

b. Upon an inappropriate or no response, use integral stimulation with a maximum of four attempts to elicit the modeled production (e.g., “Watch me, listen to me, say it with me...*ate*”). Upon an appropriate response, go to Step 2. Upon an inappropriate or no response, present the next item.

Step 2. Repeat the participant’s production and reinforce it. (e.g., “ You ate breakfast, great”.)

Step 3. Request an elaboration of the production from Step 1. If possible, use a “wh” question. (e.g. ‘What did you do after eating breakfast?’).

A. Upon an appropriate response, go to Step 4.

B. Upon an inappropriate or no response, model two response examples and request a response (e.g. “You could say something like *I did the dishes* or *watched tv*.”)

1) Upon an appropriate response, go to Step 4.

2) Upon an inappropriate or no response, provide a model and request a repetition (e.g., “Say *dishes*.” or “Say *tv*”).

a. Upon an appropriate response, go to Step 4.

b. Upon an inappropriate or no response, use integral stimulation with a maximum of four attempts to elicit the noun or verb production (e.g., “Watch me, listen to me, say it with me...*dishes*”). Upon an appropriate response, go to Step 4. Upon an inappropriate or no response, present the next item.

Step 4. Reinforce the participant’s production from Step 3 and model a phrase/sentence that combines the participant’s productions from Steps 1 and 3 (e.g. *I ate breakfast and did the dishes*.”) Go to Step 5.

Step 5. Model the combined production again and request a repetition.

A. Upon a correct response (all target words produced intelligibly), request three repetitions of the utterance using integral stimulation as needed. Go to Step 6.

B. Upon an incorrect or no response, attempt to elicit four productions of the target utterance, using integral stimulation. Go to Step 6 following correct or incorrect productions.

Step 6. Wait for approximately five seconds, then request that the participant again produce the entire utterance.

- A. Upon production of the entire elaborated utterance, reinforce the production and go to the next item.
- B. Upon production of a partial elaborated utterance, reinforce the production, model the entire elaborated utterance, and request a production with integral stimulation. Go to the next item.