Imageability & Frequency Spelling:

Instructions for Use

This task looks for effects of imageability and frequency (and their interaction) in written spelling to dictation. The words constitute a reduced set of those used to test Oral Reading [31], Lexical Decision [25], [5] and Repetition [9].

Imageability effects in written spelling appear to implicate the semantic system. Word frequency is known to influence the operation of a number of different lexical systems. (A good place to start to read about case studies of acquired disorders of spelling is Ellis. A.W. & Young, A.W. (1988) **Human Cognitive Neuropsychology**. London: Lawrence Erlbaum Associates (Chapter 7).)

Descriptive Statistics (for 28 control subjects):

High Imageability **High Frequency**	(n = 10)	Mean = 9.68 Range = 8 - 10	Std. Dev. = 0.67
High Imageability **Low Frequency**	(n = 10)	Mean = 9.25 Range = 8 - 10	Std. Dev. = 0.75
Low Imageability **High Frequency**	(n = 10)	Mean = 9.11 Range = 5 - 10	Std. Dev. = 1.37
Low Imageability **Low Frequency**	(n = 10)	Mean = 8.36 Range = 3 - 10	Std. Dev. = 1.97

Don't forget to find out about pre-morbid spelling ability. Note that control subjects were significantly poorer at spelling low imageability words, particularly when they were also low in frequency: two subjects managed to spell only 3 and 4, respectively, of the 10 Low Imageability-Low Frequency words. Errors were always visually and/or phonologically related to the target, however, and none was related semantically.

Bear in mind, then, that poor performance on low imageability words on this test does not necessarily indicate that the patient has a problem. If you suspect the patient does have a genuine difficulty (perhaps the patient makes semantic errors in spelling) then the problem should be investigated further with other sets of words.

Suggestions for Where to go next: If the subject shows a significant effect of imageability in spelling to dictation, find out whether the same effect appears using the same materials with different tasks (eg. Visual Lexical Decision [25], Auditory Lexical Decision [5]; Repetition [9]). See whether the subject shows an imageability effect in comprehension (eg. Written Synonym Judgements [50]; Auditory Synonym Judgements [49]).

If the subject shows a significant effect of frequency, look for frequency effects in other modalities (eg. Auditory Lexical Decision [5]; Repetition [9]). Compare picture naming and reading aloud on the Frequency Picture Naming task [54].

Examination of the types of errors made can also help to unravel the nature of impairment. Assess carefully the nature of error types that the subject produces (see Ellis, A.W. & Young, A.W. (1988), op. cit.).

PALPA

Imageability & Frequency Spelling: Presenter's Form

Name:		Date:

	Target	Type	Response
1	length	LI HF	
2	mother	HI HF	
3	tobacco	HI LF	
4	miracle	LI LF	
5	idea	LI HF	
6	bonus	LI LF	
7	feather	HI LF	
8	realm	LI LF	
9	clue	LI LF	
10	hospital	HI HF	
11	dogma	LI LF	
12	elephant	HI LF	
13	village	HI HF	
14	monkey	HI LF	
15	summer	HI HF	
16	thing	LI HF	
17	coffee	HI HF	
18	member	LI HF	
19	wrath	LI LF	
20	gravy	HI LF	
21	satire	LI LF	
22	session	LI HF	
23	school	HI HF	
24	pill	HI LF	
25	hand	HI HF	
26	opinion	LI HF	
27	valour	LI LF	
28	slope	HI LF	
29	hotel	HI HF	
30	wheat	HI LF	
31	gravity	LI LF	
32	spider	HI LF	
33	treason	LI LF	
34	attitude	LI HF	
35	marriage	HI HF	
36	crisis	LI HF	
37	fire	HI HF	
38	funnel	HI LF	
39	fact	LI HF	
40	moment	LI HF	

HI HF	/10		LI HF	/10
HI LF	/10		LI LF	/10

Imageability & Frequency Spelling:

Marking Form

Name:	Date:

Hi I/Hi Freq		Error Type	Hi I/Lo Freq		Error Type
coffee			elephant		
fire			feather		
hand			funnel		
hospital			gravy		
hotel			monkey		
marriage			pill		
mother			slope		
school			spider		
summer			tobacco		
village			wheat		
Total Correct			Total Correct		

Lo I/Hi Freq		Error Type	Lo I/Lo Freq		Error Type
attitude			bonus		
crisis			clue		
fact			dogma		
idea			gravity		
length			miracle		
member			realm		
moment			satire		
opinion			treason		
session			valour		
thing			wrath		
Total Correct			Total Correct		