

Imageability & Frequency Reading: Instructions for Use

This task looks for effects of imageability and frequency (and their interaction) in reading aloud. Half of all the words are high in imageability and half are low in imageability. Half of the words in each set are high in word frequency and half are low in frequency. There are therefore 4 word-sets in total: High Imageability-High Frequency; High Imageability-Low Frequency; Low Imageability-High Frequency; Low Imageability-Low Frequency. Words are matched across groups (on a one-to-one basis) as far as possible for number of letters, syllables and morphemes.

Imageability effects in oral reading appear to implicate the semantic system (cf. papers in Coltheart, M. Patterson, K.E. & Marshall, J.C. (1987) **Deep Dyslexia**, London: Routledge & Kegan Paul). Frequency effects may indicate reliance on lexical, but not necessarily semantic, processes (eg. Bub, D., Cancelliere, A. & Kertesz, A. (1985), In **Surface Dyslexia: Neuropsychological and Cognitive Studies of Phonological Reading**, edited by Patterson, K.E., Marshall, J.C. & Coltheart, M. London: Lawrence Erlbaum Associates). Word frequency is known to influence the operation of a number of different lexical systems.

Descriptive Statistics (for 32 control subjects):

High Imageability High Frequency	(n = 20)	Mean = 19.94	Std. Dev. = 0.25
High Imageability Low Frequency	(n = 20)	Mean = 19.94	Std. Dev. = 0.07
Low Imageability High Frequency	(n = 20)	Mean = 20	
Low Imageability Low Frequency	(n = 20)	Mean = 19.52	Std. Dev. = 0.68

Suggestions for Where to go next: If the subject shows a significant effect of imageability in reading aloud, find out whether the same effect appears when the task is to discriminate between written words and nonwords (eg. Visual Lexical Decision [25]). Test performance with the same materials in another modality (eg. 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 in reading aloud, test Visual Lexical Decision [25] and 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: semantic errors, for example, tend to go hand-in-hand with imageability effects (cf. papers in **Deep Dyslexia**, op.cit.) and suggest further exploration of semantic abilities (eg. written word-picture matching [48]). If a patient shows this pattern, test for morphological errors in reading aloud [34], difficulties with grammatical words [32, 33] and nonwords [36].

Reading Task

Please read each word aloud as clearly as you can

alcohol

night

episode

pig

hospital

thing

marriage

moment

funnel

mercy

pact

clue

length

spider

character

hand

axe

audience

deed

fire

analogy

wrath

pill

elephant

mother

bonus

member

effort

miracle

tractor

letter

gravy

quality

attitude

concept

dogma

wheat

window

coffee

manner

Reading Task

Please read each word aloud as clearly as you can

potato**plea****elbow****radio****thought****feather****principle****valour****satire****crisis****realm****school****summer****monkey****theory****village****gravity****hotel****drum****woe****idea****slope****plane****fact****tobacco****purpose****tribute****onion****irony****treason****picture****system****opinion****student****cart****pupil****church****folly****battle****session**

Imageability & Frequency Reading: Presenter's Form 1

Name: _____	Date: _____
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Marking Instructions: Circle incorrect answers in 'Type' column. Write subject's responses in space provided to allow examination of error types.

Target	Type	Response
alcohol	HI LF	
night	HI HF	
episode	LI LF	
pig	HI LF	
hospital	HI HF	
thing	LI HF	
marriage	HI HF	
moment	LI HF	
funnel	HI LF	
mercy	LI LF	
pact	LI LF	
clue	LI LF	
length	LI HF	
spider	HI LF	
character	LI HF	
hand	HI HF	
axe	HI LF	
audience	HI HF	
deed	LI LF	
fire	HI HF	
analogy	LI LF	
wrath	LI LF	
pill	HI LF	
elephant	HI LF	
mother	HI HF	
bonus	LI LF	
member	LI HF	
effort	LI HF	
miracle	LI LF	
tractor	HI LF	
letter	HI HF	
gravy	HI LF	
quality	LI HF	
attitude	LI HF	
concept	LI HF	
dogma	LI LF	
wheat	HI LF	
window	HI HF	
coffee	HI HF	
manner	LI HF	

Name: _____ Date: _____

Target	Type	Response
potato	HI LF	
plea	LI LF	
elbow	HI LF	
radio	HI HF	
thought	LI HF	
feather	HI LF	
principle	LI HF	
valour	LI LF	
satire	LI LF	
crisis	LI HF	
realm	LI LF	
school	HI HF	
summer	HI HF	
monkey	HI LF	
theory	LI HF	
village	HI HF	
gravity	LI LF	
hotel	HI HF	
drum	HI LF	
woe	LI LF	
idea	LI HF	
slope	HI LF	
plane	HI HF	
fact	LI HF	
tobacco	HI LF	
purpose	LI HF	
tribute	LI LF	
onion	HI LF	
irony	LI LF	
treason	LI LF	
picture	HI HF	
system	LI HF	
opinion	LI HF	
student	HI HF	
cart	HI LF	
pupil	HI LF	
church	HI HF	
folly	LI LF	
battle	HI HF	
session	LI HF	
HI HF	/20	HIGH IMAGEABILITY /40
HI LF	/20	LOW IMAGEABILITY /40
LI HF	/20	HIGH FREQUENCY /40
LI LF	/20	LOW FREQUENCY /40

PALPA

Imageability & Frequency Reading: Marking Form

Name: _____

Date: _____

A High I / High Frequency Words		D High I / Low Frequency Words	
audience		alcohol	
battle		axe	
church		cart	
coffee		drum	
fire		elbow	
hand		elephant	
hospital		feather	
hotel		funnel	
letter		gravy	
marriage		monkey	
mother		onion	
night		pig	
picture		pill	
plane		potato	
radio		pupil	
school		slope	
student		spider	
summer		tobacco	
village		tractor	
window		wheat	
Total Correct	/20	Total Correct	/20
C Low I / High Frequency Words		D Low I / Low Frequency Words	
attitude		analogy	
character		bonus	
concept		clue	
crisis		deed	
effort		dogma	
fact		episode	
idea		folly	
length		gravity	
manner		irony	
member		mercy	
moment		miracle	
opinion		pact	
principle		plea	
purpose		realm	
quality		satire	
session		treason	
system		tribute	
theory		valour	
thing		woe	
thought		wrath	
Total Correct	/20	Total Correct	/20