

Supplementary Material for

**Repeated Exposure to Exemplars Does Not Enhance Implicit Learning:**

**A Puzzle for Models of Learning and Memory**

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**Appendix A – Word Lists**

**Study List 1.**

ARM	ABBREVIATION
BALL	ALLURE
BAR	APPLICATOR
BODY	BELIEVABLE
BRIDGE	BITTERSWEET
BUILDING	BOOSTER
CHURCH	COMMENDATION
EARTH	DEHUMANIZE
EQUIPMENT	DEPICTION
FACE	DIABOLICAL
FARM	DIVIDER
FIRE	EXHAUSTIBLE
HAIR	GLORIFICATION
HOTEL	INDESTRUCTIBLE
HUMAN	INKLING
JACK	LARVAL
KING	MELD
LADY	MEDITATE
LAND	NAB
MARKET	OBSCENITY
MOTHER	PENSIVE
OFFICER	PRESCRIPTIVE
PAPER	PUNITIVE
PLANE	RECREATE
POET	ROVE
POST	SARCASM
PRESIDENT	SATIATE
RIVER	SCATHING
ROAD	SHAKESPEARIAN
ROSE	SECLUDE
SHIP	SULTRY
SPRING	SYNTHESIZE
STREET	SUP

STUDENT  
SUN  
TEACHER  
TRAIN  
UNIVERSITY  
WINDOW  
WOMAN

THANKLESS  
TIDAL  
TREASONOUS  
UNDERRATE  
UNFLATTERING  
WASTAGE  
UNHOOK

## Study List 2.

WRITTEN	WOMB
UNITED	WIG
TOWARD	VEAL
THOUSAND	UMPIRE
SUPPORT	TORNADO
STRESS	THIMBLE
SON	STOCKING
SOMEONE	SQUIRREL
SAYING	SNAIL
PRESS	SHRUB
POSSIBLE	SAP
POLICY	RASPBERRY
ORIGINAL	PROJECTOR
MOREOVER	POLIO
MET	PICKLE
MEDICAL	PERCH
MARKED	PARCEL
LOT	OATMEAL
JAZZ	MORPHINE
ITSELF	MAMMAL
INTERNATIONAL	KITE
INDICATE	JEWEL
HAVING	INFIRMARY
GIVEN	HOCKEY
FORWARD	HELMET
ENERGY	GROCER
DRIVE	FLORA
DEMAND	ENAMEL
COVERED	DUCHESS
COMPLETE	DOE
CLOSED	DIAL
CHOICE	DANDELION
BRITISH	CLOVE
BETTER	CARROT
ANYTHING	CAMEL
ANALYSIS	BOAR
ALLOWED	AVALANCHE
ACTIVE	ASPARAGUS
ACROSS	APRICOT
ABOVE	ACCORDION

## Test List 1.

BATTLE  
BILL  
BOOK  
CENT  
CHILDREN  
DINNER  
FATHER  
FILM  
GAS  
HALL  
HOME  
HOUSE  
ISLAND  
MACHINE  
MATERIAL  
MONEY  
OFFICE  
ROOM  
SECRETARY  
WATER  
ARTIFICIALITY  
AVERT  
BEMOAN  
CATEGORIZE  
CLOD  
CUSTODIAL  
EFFLORESCE  
EQUINE  
FINIAL  
GRIZZLED  
HOME-BRED  
INFINITIVE  
JUDICIOUS  
NEBULA  
OVERBLOWN  
PARTAKING  
PRAYERFUL  
SHIFTLESS  
STEELY  
UNSAID  
ACTUAL  
APPLIED  
BECOME  
BELIEVE  
CHARGE

BAGPIPE  
BELFRY  
BRACELET  
CLARINET  
EARTHWORM  
EWE  
FOWL  
GIG  
GULLET  
HADDOCK  
HARE  
HORSEHAIR  
ICICLE  
MINER  
MOTH  
MUG  
PENICILLIN  
SKATE  
SLEET  
WAND  
BODY  
BUILDING  
EQUIPMENT  
FACE  
HOTEL  
HUMAN  
LAND  
MARKET  
OFFICER  
PLANE  
PRESIDENT  
ROAD  
ROSE  
SHIP  
SPRING  
STREET  
STUDENT  
TEACHER  
WOMAN  
ABBREVIATION  
APPLICATOR  
BITTERSWEET  
COMMENDATION  
DEHUMANIZE  
DEPICTION

CIVIL  
DESIGNED  
DISTRIBUTION  
DOUBT  
EVERYONE  
FEED  
FRENCH  
LET  
LOOKING  
MOVING  
NATURAL  
PREVIOUS  
SERVE  
SPENT  
THINKING

DIABOLICAL  
DIVIDER  
LARVAL  
PENSIVE  
PRESCRIPTIVE  
PUNITIVE  
RECREATE  
SARCASM  
SATIATE  
SECLUDE  
SULTRY  
TREASONOUS  
UNDERRATE  
UNFLATTERING  
UNHOOK

## Test List 2.

ACTUAL	ARTIFICIALITY
APPLIED	AVERT
BECOME	BEMOAN
BELIEVE	CATEGORIZE
CHARGE	CLOD
CIVIL	CUSTODIAL
DESIGNED	EFFLORESCE
DISTRIBUTION	EQUINE
DOUBT	FINIAL
EVERYONE	GRIZZLED
FEED	HOME-BRED
FRENCH	INFINITIVE
LET	JUDICIOUS
LOOKING	NEBULA
MOVING	OVERBLOWN
NATURAL	PARTAKING
PREVIOUS	PRAYERFUL
SERVE	SHIFTLESS
SPENT	STEELY
THINKING	UNSAID
BAGPIPE	ACROSS
BELFRY	ALLOWED
BRACELET	ANALYSIS
CLARINET	ANYTHING
EARTHWORM	BRITISH
EWE	CHOICE
FOWL	CLOSED
GIG	DEMAND
GULLET	ENERGY
HADDOCK	GIVEN
HARE	HAVING
HORSEHAIR	INTERNATIONAL
ICICLE	ITSELF
MINER	LOT
MOTH	MARKED
MUG	MEDICAL
PENICILLIN	ORIGINAL
SKATE	POSSIBLE
SLEET	PRESS
WAND	SOMEONE
BATTLE	SON
BILL	SUPPORT
BOOK	THOUSAND
CENT	TOWARD
CHILDREN	UNITED

DINNER  
FATHER  
FILM  
GAS  
HALL  
HOME  
HOUSE  
ISLAND  
MACHINE  
MATERIAL  
MONEY  
OFFICE  
ROOM  
SECRETARY  
WATER

ACCORDION  
ASPARAGUS  
CAMEL  
CARROT  
CLOVE  
DOE  
HELMET  
HOCKEY  
INFIRMARY  
PARCEL  
PERCH  
PICKLE  
RASPBERRY  
SAP  
UMPIRE

Table B1

*Proportion of Attribution Chosen by Word Type, Task Type and Study Strength in Experiment 1 (SE in brackets)*

Task Type	Weak study				Strong study			
	Random Chance	Intuition	Memory	Rules	Random Chance	Intuition	Memory	Rules
Recognition								
Old	.06 (.02)	.17 (.04)	.67 (.05)	.10 (.05)	.10 (.05)	.11 (.02)	.75 (.05)	.03 (.02)
NC	.12 (.02)	.38 (.04)	.43 (.05)	.07 (.02)	.11 (.02)	.35 (.05)	.49 (.06)	.05 (.02)
NI	.12 (.03)	.39 (.05)	.41 (.06)	.07 (.02)	.11 (.02)	.32 (.06)	.53 (.07)	.03 (.15)
Classification								
Old	.09 (.02)	.14 (.02)	.60 (.06)	.17 (.05)	.04 (.01)	.13 (.02)	.81 (.03)	.02 (.01)
NC	.23 (.05)	.35 (.04)	.27 (.07)	.15 (.03)	.30 (.06)	.43 (.05)	.18 (.04)	.09 (.03)
NI	.26 (.06)	.34 (.04)	.25 (.06)	.14 (.03)	.27 (.06)	.47 (.06)	.17 (.05)	.09 (.02)

Table B2

*Proportion of Attribution Chosen by Word Type, Task Type and Study Strength in Experiment 2 (SE in brackets)*

Task Type	Weak study				Strong study			
	Random Chance	Intuition	Memory	Rules	Random Chance	Intuition	Memory	Rules
Recognition								
Old	.19 (.03)	.31 (.04)	.15 (.05)	.05 (.02)	.13 (.02)	.22 (.03)	.57 (.05)	.07 (.03)
NC	.28 (.05)	.44 (.04)	.22 (.04)	.06 (.02)	.20 (.04)	.34 (.05)	.39 (.07)	.06 (.02)
NI	.25 (.04)	.46 (.03)	.24 (.05)	.05 (.02)	.21 (.03)	.38 (.06)	.36 (.08)	.05 (.02)
Classification								
Old	.17 (.04)	.31 (.02)	.40 (.05)	.12 (.04)	.11 (.02)	.21 (.04)	.55 (.06)	.12 (.03)
NC	.31 (.05)	.38 (.03)	.15 (.03)	.16 (.04)	.26 (.05)	.38 (.04)	.21 (.04)	.14 (.03)
NI	.30 (.05)	.36 (.04)	.21 (.05)	.13 (.03)	.22 (.05)	.39 (.04)	.25 (.05)	.15 (.03)

Table B3

*Proportion of Attribution Chosen by Word Type, Task Type and Study Strength in Experiment 3 (SE in brackets)*

Task Type	Weak study				Strong study			
	Random Chance	Intuition	Memory	Rules	Random Chance	Intuition	Memory	Rules
Recognition								
Old	.19 (.04)	.37 (.04)	.38 (.04)	.06 (.02)	.11 (.03)	.15 (.03)	.68 (.04)	.06 (.01)
NC	.27 (.04)	.47 (.04)	.20 (.04)	.06 (.02)	.18 (.04)	.31 (.07)	.44 (.06)	.06 (.02)
NI	.25 (.05)	.44 (.04)	.24 (.05)	.06 (.02)	.17 (.03)	.31 (.07)	.43 (.07)	.08 (.02)
Classification								
Old	.18 (.04)	.26 (.04)	.39 (.05)	.17 (.04)	.09 (.04)	.20 (.05)	.64 (.07)	.06 (.02)
NC	.23 (.03)	.37 (.04)	.18 (.03)	.23 (.06)	.25 (.05)	.36 (.03)	.20 (.05)	.19 (.04)
NI	.26 (.04)	.37 (.04)	.16 (.03)	.22 (.06)	.23 (.04)	.41 (.03)	.19 (.05)	.17 (.04)