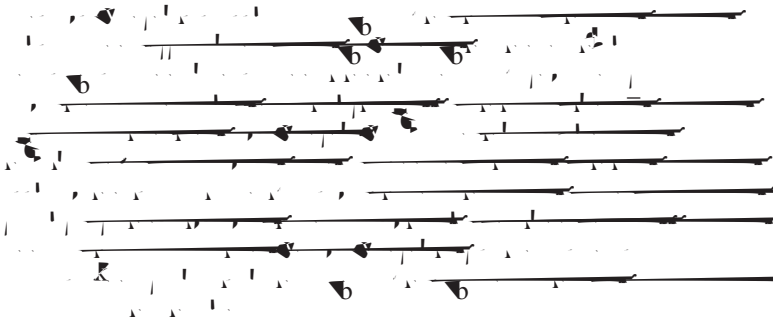
Implications for Adaptive Action

Reed College

Although reinforcement often leads to repetitive, even stereot ped responding, that is not a necessar outcome. When it depends on variations, reinforcement results in responding that is diverse, novel, indeed unpredictable, ith distributions sometimes approaching those of a random process. This article revie s evidence for the po erful and precise control b reinforcement over behavioral variabilit , evidence obtained from human and animal-model studies, and implications of such control. For e ample, reinforcement of variabilit facilitates learning of comple ne responses, aids problem solving, and ma contribute to creativit . Depression and autism are characteri ed b abnormall repetitive behaviors, but individuals af, icted ith such ps chopathologies can learn to var their behaviors hen reinforced for so doing. And reinforced variabilit ma help to solve a basic pu le concerning the nature of voluntar action

Va ab I e I a ce



M

operant vari-

abilit

superposition

do

Unbestimmtheit

Zufall

'Inde-

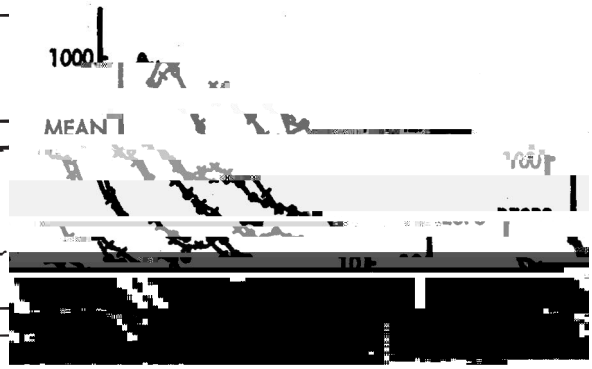
termination

indeterminist

respondent

instrumental

F8 e 1
E de ce f S c a c Re d b P e



Q e a Va 8ab88

Operant responses

Vari-
abilit

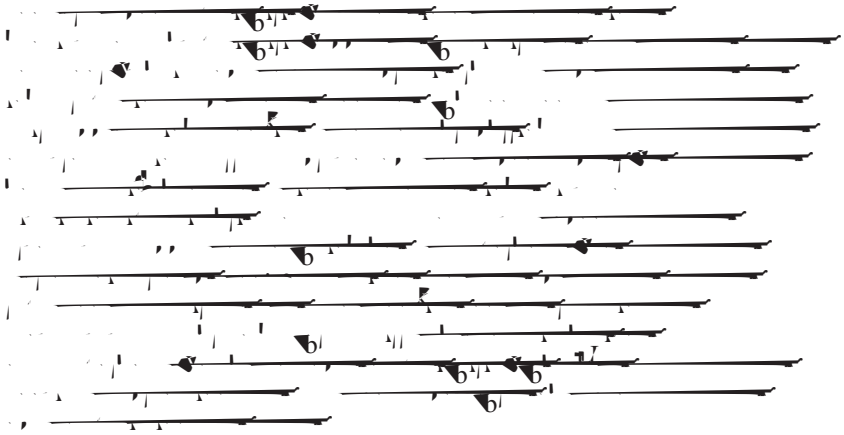
Random

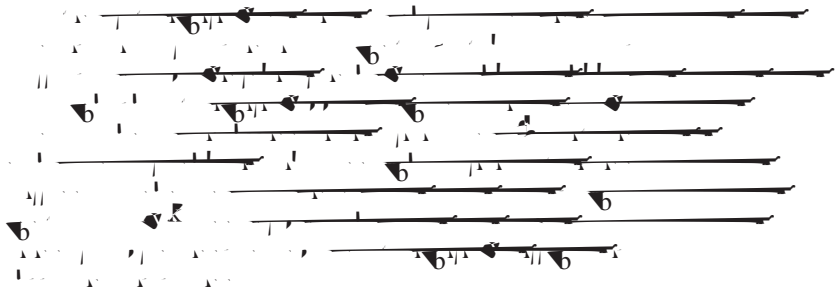
Random

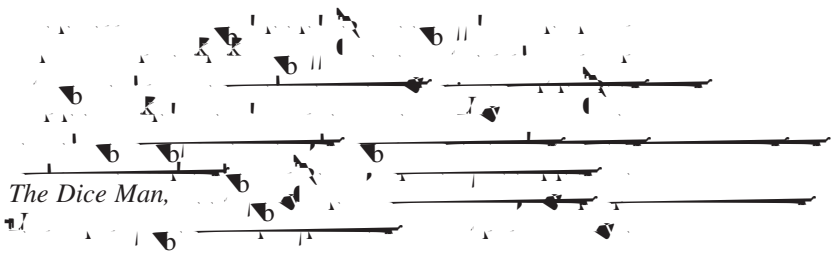
stochastic
random

N e. T a da a B (1966) d d aa c d ( ), ca a ac aa . S a a b (RESPS) d ac a- c d (HALF-SEC) (IRT) b , a a - e d a c a c d . F T R c L a F l T , b D. S. B , 1966, *J a f e E e a A a f Be q , 9,* . 587. C 1966 b S c E - a. A a. B a . Ada d . T b .2(2( )-40 .2) TJ -25-48 E 2 E R 2 - .

I e T Va ab

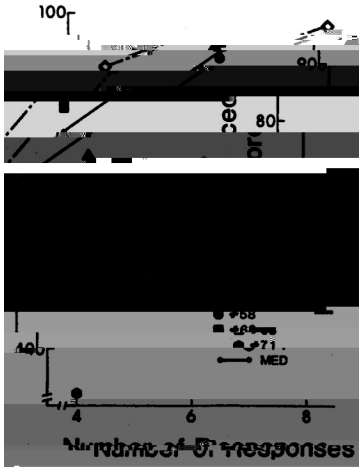






The Dice Man,

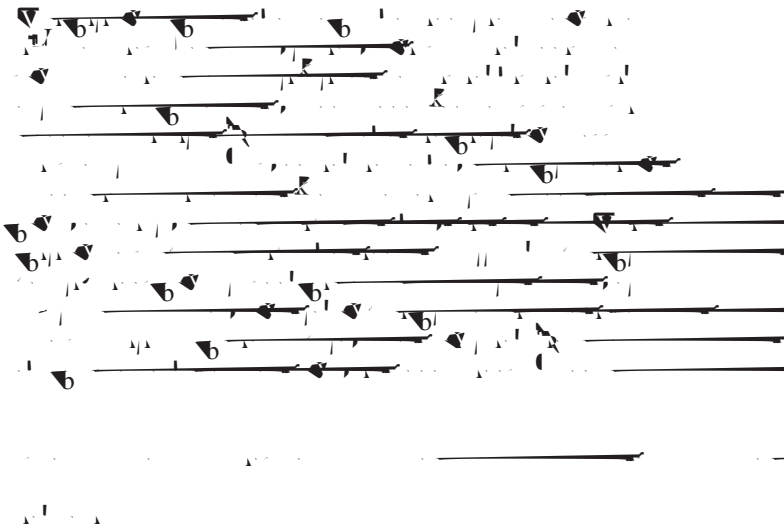
F8 e 4
Le e f Re e Va ab (S b Pe ce a e f Re f ced T a) a N be f Re e Pe T a I c ea ed

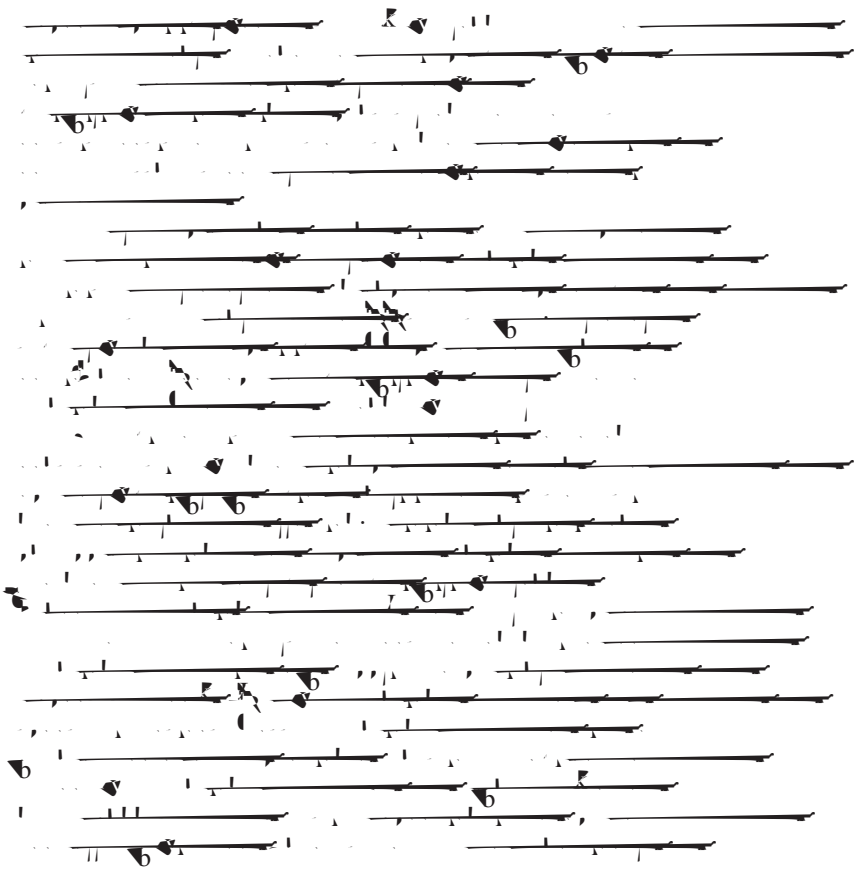


N e. I d d a ' daa a b d b , a a (MED) b d . T b daa a a ad a (RND) d d ca c c . F Va ab I a O a , b S. Pa a d A. N , 1985, *J a f E e e a P c : A a Be q P ce e , 11*, . 440. C 1985 b A ca P c ca A ca . R d .

e perimental evidence

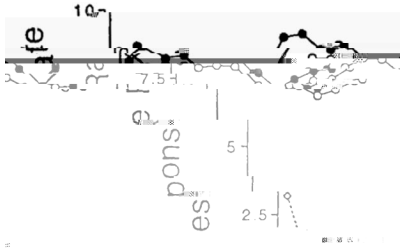
F c8 f Va 8ab88

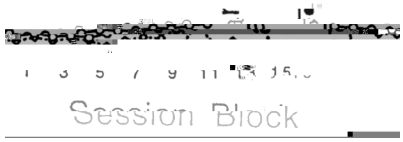




F8 e 6

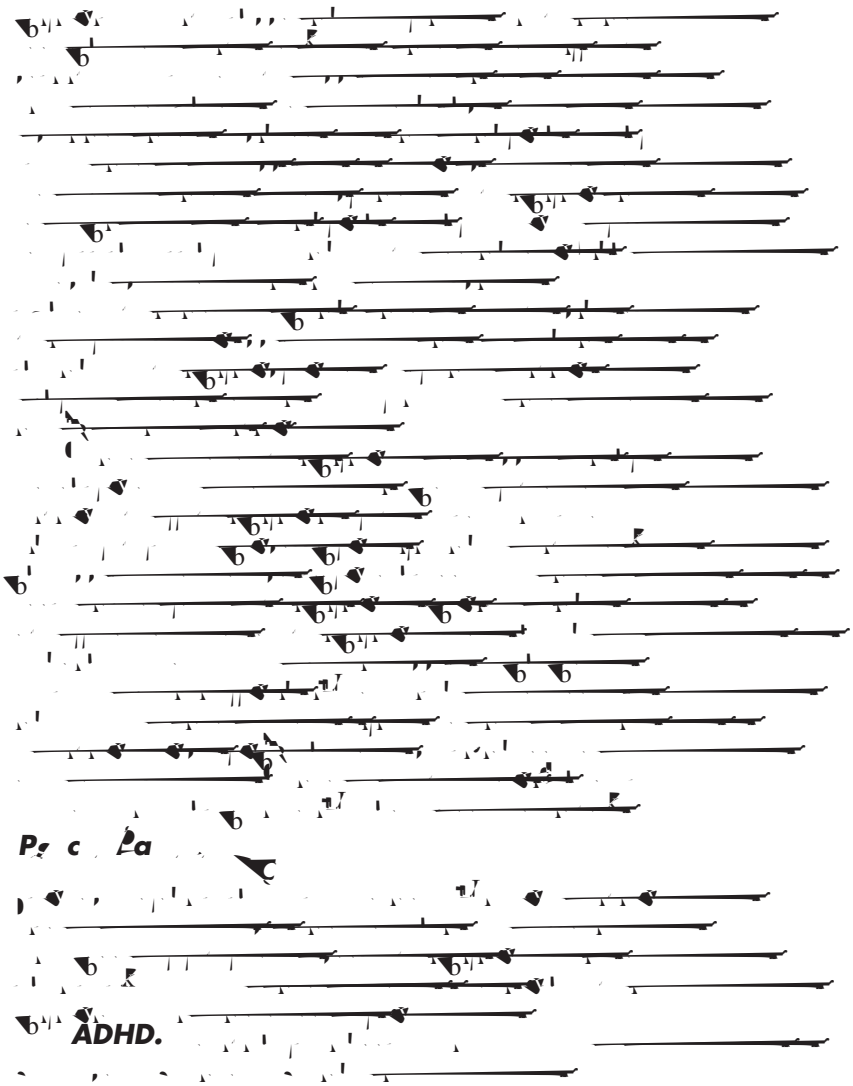
Re f ce e f Va a Fac a e Ac.. f a D ff c Re e Se .. e ce

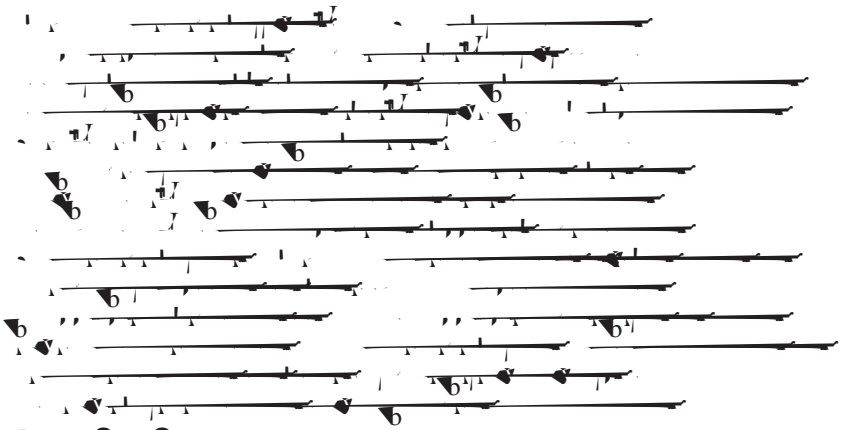


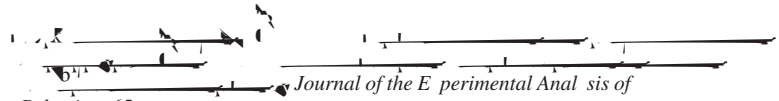


N e. T a a a a d (a) b ac a ac b. c .T b a c a a c a c , a d.T a ab c c db d c c. a d a d , b c c. a d a d . a d a b c c. a d a d a d . F R c d Va ab a d O a L a , b A. N , C. D , a d G. O. , 2000, *J a f E e e a P c : A a Be q P ce e , 26,* . 102 103. C 2000 b A ca P c ca. A ca . R d .

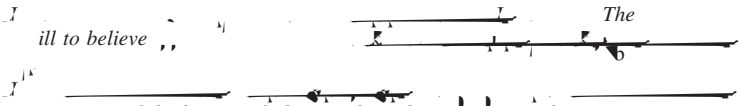
P b S


Pe c La
C
ADHD.





Journal of the E perimental Anal sis of Behavior, 65,



The ill to believe ,,

Dictionar of the histor of ideas: Volume 2. Despotism to la , common