

i fcha bic m nrb Ch qpc o f p fch an hmlig r lc h

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Abstract

an “observation.” Also, all model parameters have been
 ion as a test of a model’s ability to account for data

Prime Sampler (PS) Model

$$k$$

$$k$$

$$k$$

$$N$$

$$N$$

models'

The TechnionCalibration Dataset

subjected to an experimental setup, the “e
 condition.” In this condition, participants sampled the two

$$\frac{\binom{N}{k}}{\binom{N}{k} + \binom{N}{N-k}} = \frac{\binom{N}{k}}{\binom{N}{k} + \binom{N}{N-k}}$$

$$\frac{\binom{N}{k}}{\binom{N}{k} + \binom{N}{N-k}}$$

$$\text{Option } X$$

$$\binom{N}{k}$$

Natural Mean Heuristic (NMH) Model

$$n$$

$$n$$

k = an observation’s sample size. There are no free

Instance Based Learning (IBL) Model

d $\gamma_{i\ t}$ t_i
instance i d σ d
 d
 d
 (< 1.0). The σ paramet
 sample variability in an instance’s activation.

$V_{j,t}$
 The Coin Toss (CT) Model
 j t
 (2)
 $x_{i,t}$ i
 t $p_{i,t}$ participants’ individual choice
 I t $x_{i,t}$
 j Method
 Model Execution
 n j n j
 n
 n
 t i

evaluate an “error ratio” (i.e., the ratio of incorrectly
 τ $\bar{2}$ σ

e’s the outcome’s
 t

$$A_{i\ t} = \sigma \left(\frac{-\gamma_{i\ t}}{\gamma_{i\ t}} \right) + \sum_{t_i \in t-}^n t - t_i^{-d}$$

Across the 5 runs, the model's average

(5)

Results

N

N

N

N

N

N

N

N

number of UN cases, the poorer is the corresponding model's

N
 N

N

N

N

N

N

N

model's calibration

out of 2,370 observations. The PS model's best average error

d

σ

d σ

Combinations from Human Data and Model h/m	Number of Observations	Percentage of 2370 Observations

Table 2 shows the results from this model. The model's

eters $d=13.6$ and $\sigma=0.22$. The

Choice Combinations from Human Data and Model	Average Number of Observations across 5 Run	Percentage of 2370 Observations

Combinations from Human Data and Model H/M	Average Number of Observations	Percentage of 2370 Observations

's

Next, we evaluated the IBL model's ability to account for

d and σ in the IBL model were found to be 13.6 and d

small σ value exhibited lesser sample

Model	Parameters	UN Observations	Error ratio
	N		
	$d=13.6, \sigma=0.22$		

statistics, the IBL model's performance was better than the

Model	UN Observations	Error ratio

Discussion& Conclusion

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model's ma

References

model's strength is in its

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