Supplementary materials 3

	RT	MAD	AD	MD	AUC
RT	NA	$r=0.48, p <0.001$***	$r=0.51, p <0.001$***	$r=0.52, p <0.001$***	$r=0.38, p <0.004$**
MAD		NA	$r=0.95, p <0.001$***	$r=0.99, p <0.001$***	$r=0.93, p <0.001$***
AD			NA	$r=0.94, p <0.001$***	$r=0.87, p <0.001$***
MD				NA	$r=0.91, p <0.001$***
AUC					NA

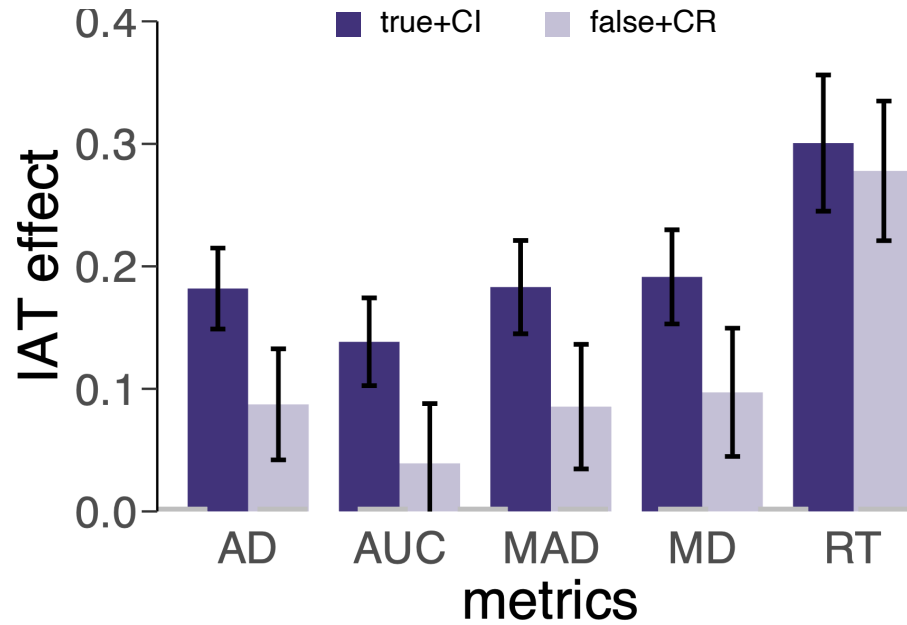**Table. S 1.** Inter-correlation among IAT effects of RT and MT metrics

Figure. S 1. IAT effect of he combination of true+CI showed no difference from false+CR (AD: $t_{57} = 1.84, p = 0.07$, 95% CI from 0 to 0.20; AUC: $t_{57} = 1.61, p = 0.11$, 95% CI from -0.02 to 0.22; MAD: $t_{57} = 1.65, p = 0.10$, 95% CI from -0.02 to 0.22; MD: $t_{57} = 1.64, p = 0.11$, 95% CI from -0.02 to 0.21; RT: $t_{57} = 5.57, p = 0.57$, 95% CI from -0.05 to 0.10).

	modulated by **Past Negative Score**	modulated by **AUC**
model 1	yes	yes
model 2	yes	no
model 3	no	yes
model 4	no	no

Figure. S 2. Four models with a combination of PN and AUC as modulators.

	correlation with overall IAT effect (RT)	no significant difference from overall IAT effect (RT)	correlation with overall IAT effect (MT)	no significant difference: true+CR vs. false+CI	true+CR~MT IAT	false+CI~MT IAT	true+CR~RT IAT	false+CI~RT IAT
model 1	yes	yes	yes	*	yes	yes	yes	yes
model 2	no	yes	only AUC	***	no	no	no	no
model 3	yes	no	yes	***	yes	yes	yes	yes
model 4	no	yes	no	***	no	no	no	no

Figure. S 3. (a) The structure of Connectionist Model. (b) The simulated agent committed crime-relevant events as our participants did, such that the connectionist model comes to encode strong associations between neurons encoding true and crime-relevant features. (c, d) During subsequent perception, sensory input to sub-populations encoding the autobiographical feature of that agent generates additional activity via recurrent synaptic connections if those features overlap with the encoded feature.