

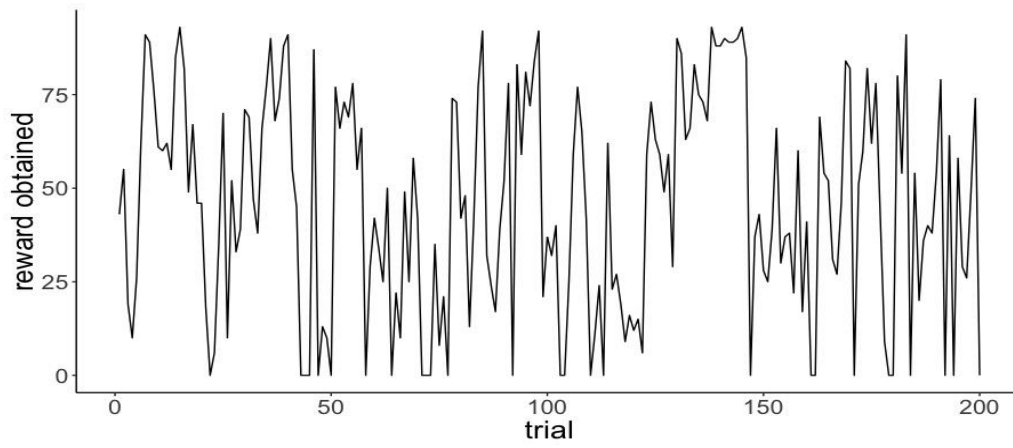
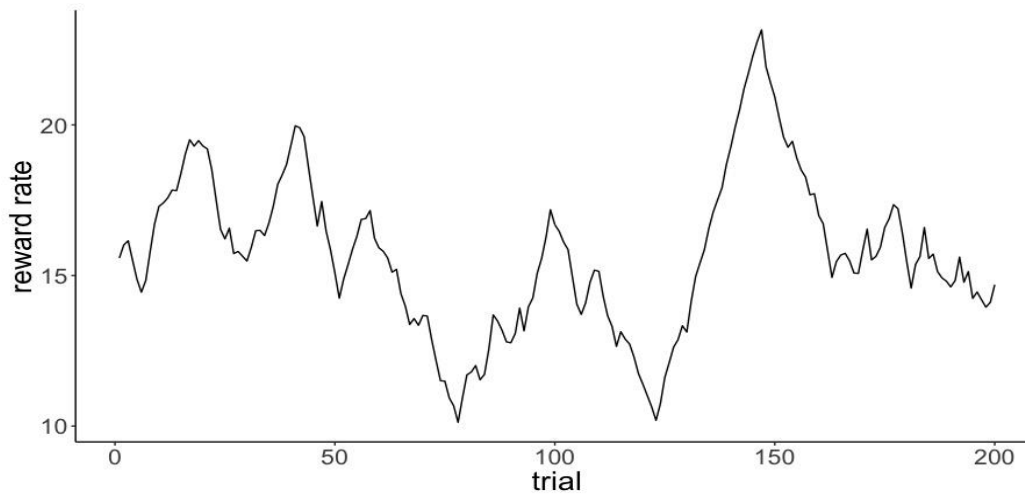
A**B**

Figure 1. (A) Example of trial-to trial fluctuation in reward on offer for one subject. (B) Example of trial-to trial fluctuation in reward rate for the same subject.

Table 1

Regression table for within-group mixed-effects regressions on (log) RT in the Flanker task.

Age Group	Coefficients	β	SE	<i>p</i> -value
CH	<i>(Intercept)</i>	6.2027	0.0086	< .0001***
	trial_type	-0.0074	0.0020	.0004***
	reward	-0.0042	0.0019	.0316*
	reward_rate	0.0007	0.0027	.7834
	trial_type*reward_rate	-0.0005	0.0015	.7560
	reward_rate*reward	-0.0005	0.0014	.7204
	trial_type*reward	0.0034	0.0015	.0226*
	trial_type*reward_rate*reward	-0.0003	0.0014	.8595
AD	<i>(Intercept)</i>	5.9314	0.0067	< .0001***
	trial_type	-0.0095	0.0027	.0012**
	reward	-0.0039	0.0021	.0654
	reward_rate	0.0028	0.0028	.3262
	trial_type*reward_rate	-0.0004	0.0017	.3601
	reward_rate*reward	-0.0036	0.0018	.0467*
	trial_type*reward	-0.0004	0.0017	.8097
	trial_type*reward_rate*reward	-0.0003	0.0018	.8697
YA	<i>(Intercept)</i>	5.9245	0.0066	< .0001***
	trial_type	-0.0188	0.0023	< .0001***
	reward	-0.0067	0.0016	< .0001***

	reward_rate	-0.0040	0.0031	.1937
	trial_type*reward_rate	0.0004	0.0014	.7170
	reward_rate*reward	0.0022	0.0014	.1274
	trial_type*reward	0.0009	0.0014	.9459
	trial_type*reward_rate*reward	0.0002	0.0014	.9054
OA	(Intercept)	6.1986	0.0106	< .0001***
	trial_type	-0.0173	0.0022	< .0001***
	reward	-0.0027	0.0019	0.1567
	reward_rate	-0.0079	0.0019	.0003***
	trial_type*reward_rate	0.008	0.0015	.5835
	reward_rate*reward	0.0003	0.0014	.8408
	trial_type*reward	0.0003	0.0015	.8439
	trial_type*reward_rate*reward	0.0014	0.0014	.3167

Table 2

Regression table for within-group mixed-effects regressions on accuracy in the Flanker task.

Age Group	Coefficients	β	SE	<i>p</i> -value
CH	<i>(Intercept)</i>	1.3726	0.1277	< .0001***
	trial_type	0.2245	0.0278	< .0001***
	reward	0.0598	0.0292	.0402*
	reward_rate	0.0652	0.0413	.1142
	trial_type*reward_rate	0.0443	0.0264	.0931
	reward_rate*reward	0.0163	0.0253	.5190
	trial_type*reward	-0.0124	0.0262	.6347
	trial_type*reward_rate*reward	-0.021	0.0252	.4022
AD	<i>(Intercept)</i>	1.445	0.1183	< .0001***
	trial_type	0.5441	0.0523	< .0001***
	reward	0.0414	0.0389	.2880
	reward_rate	-0.0231	0.0387	.5501
	trial_type*reward_rate	0.01727	0.0381	.6502
	reward_rate*reward	-0.1561	0.0397	< .0001***
	trial_type*reward	0.0500	0.0377	.1839
	trial_type*reward_rate*reward	-0.0269	0.0370	.4972
YA	<i>(Intercept)</i>	2.2607	0.1565	< .0001***
	trial_type	0.7126	0.0681	< .0001***
	reward	-0.0836	0.0513	.1035

	reward_rate	-0.090	0.0492	.0665
	trial_type*reward_rate	0.0560	0.0486	.2492
	reward_rate*reward	-0.0645	0.0507	.2033
	trial_type*reward	-0.0465	0.0481	.3401
	trial_type*reward_rate*reward	-0.0186	0.0507	.7131
OA	(Intercept)	2.7116	0.1525	< .0001***
	trial_type	0.2968	0.0653	< .0001***
	reward	0.0228	0.0788	.7725
	reward_rate	0.1605	0.0734	.0287
	trial_type*reward_rate	-0.0596	0.0550	.2784
	reward_rate*reward	0.0551	0.0520	.2898
	trial_type*reward	0.0524	0.0541	.3331
	trial_type*reward_rate*reward	0.0422	0.0516	.4133

Table 3

Regression table for within-group mixed-effects regressions on (log) RT in the task-switching paradigm.

Age Group	Coefficients	β	SE	<i>p</i> -value
CH	<i>(Intercept)</i>	6.4820	0.0174	< .0001***
	trial_type	-0.0125	0.0029	< .0001***
	reward	0.0013	0.0028	0.6493
	reward_rate	-0.0074	0.0038	0.0600
	trial_type*reward_rate	-0.0034	0.0026	.1917
	reward_rate*reward	-0.0023	0.0025	.3531
	trial_type*reward	0.0010	0.0026	.7117
	trial_type*reward_rate*reward	0.0012	0.0024	.6303
AD	<i>(Intercept)</i>	6.1780	0.0133	< .0001***
	trial_type	-0.0080	0.0035	.02719*
	reward	0.0001	0.0031	.9634
	reward_rate	0.0012	0.0044	.7894
	trial_type*reward_rate	0.0021	0.0027	.4336
	reward_rate*reward	0.0065	0.0028	0.0204*
	trial_type*reward	-0.0034	0.0027	.2087
	trial_type*reward_rate*reward	-0.0004	0.0028	.8749
YA	<i>(Intercept)</i>	6.1671	0.0134	< .0001***
	trial_type	-0.0142	0.0030	< .0001***

	reward	-0.0013	0.0026	.6145
	reward_rate	0.0038	0.0042	.3757
	trial_type*reward_rate	-0.0001	0.0025	.9700
	reward_rate*reward	0.0037	0.0025	.1318
	trial_type*reward	-0.0002	0.0024	.9302
	trial_type*reward_rate*reward	0.0049	0.0025	.0470*
OA	(Intercept)	6.532	0.0164	< .0001***
	trial_type	-0.0195	0.0389	< .0001***
	reward	0.0041	0.0031	.1796
	reward_rate	-0.0160	0.0050	.0032**
	trial_type*reward_rate	-0.0070	0.0031	.0216*
	reward_rate*reward	-0.0059	0.0028	.0387*
	trial_type*reward	0.0072	0.0031	.0190*
	trial_type*reward_rate*reward	0.0016	0.0028	.5763

Table 4

Regression table for within-group mixed-effects regressions on accuracy in the task-switching paradigm.

Age Group	Coefficients	β	SE	<i>p</i> -value
CH	<i>(Intercept)</i>	1.3726	0.1277	< .0001***
	trial_type	0.2245	0.02783	< .0001***
	reward	0.0598	0.0292	0.0402*
	reward_rate	0.0652	0.0413	.1142
	trial_type*reward_rate	0.0443	0.0264	.0931
	reward_rate*reward	0.0163	0.0253	.5190
	trial_type*reward	-0.0124	0.0262	.6347
	trial_type*reward_rate*reward	-0.0211	0.0252	.4022
AD	<i>(Intercept)</i>	1.4455	0.0118	< .0001***
	trial_type	0.5441	0.0523	< .0001***
	reward	0.0414	0.0389	0.2880
	reward_rate	-0.0231	0.0387	.5501
	trial_type*reward_rate	0.0173	0.0381	.6502
	reward_rate*reward	-0.1561	0.0397	< .0001***
	trial_type*reward	0.0500	0.0377	.1839
	trial_type*reward_rate*reward	-0.0269	0.0397	.4972
YA	<i>(Intercept)</i>	2.2607	0.1565	< .0001***
	trial_type	0.7126	0.0681	< .0001***

	reward	-0.0836	0.0513	.1035
	reward_rate	-0.0903	0.0492	.0665
	trial_type*reward_rate	0.0560	0.0486	.2492
	reward_rate*reward	-0.0645	0.0507	.2033
	trial_type*reward	-0.0465	0.0481	.3340
	trial_type*reward_rate*reward	-0.0186	0.0501	.7131
OA	<i>(Intercept)</i>	2.7116	0.0152	< .0001***
	trial_type	0.2968	0.0653	< .0001***
	reward	0.0228	0.0788	.7725
	reward_rate	0.1605	0.0733	.0287*
	trial_type*reward_rate	-0.0596	0.0550	.2784
	reward_rate*reward	0.0551	0.0520	.2898
	trial_type*reward	0.0524	0.0541	.3308
	trial_type*reward_rate*reward	0.0422	0.0516	.4133
