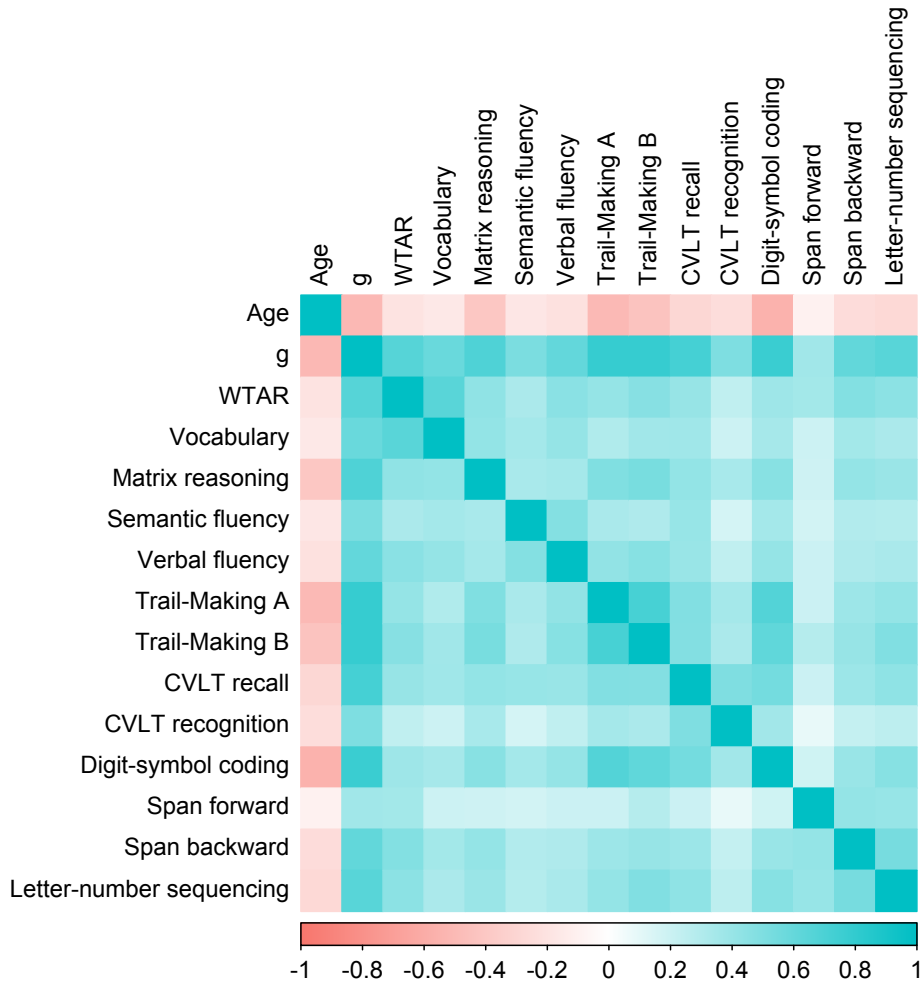


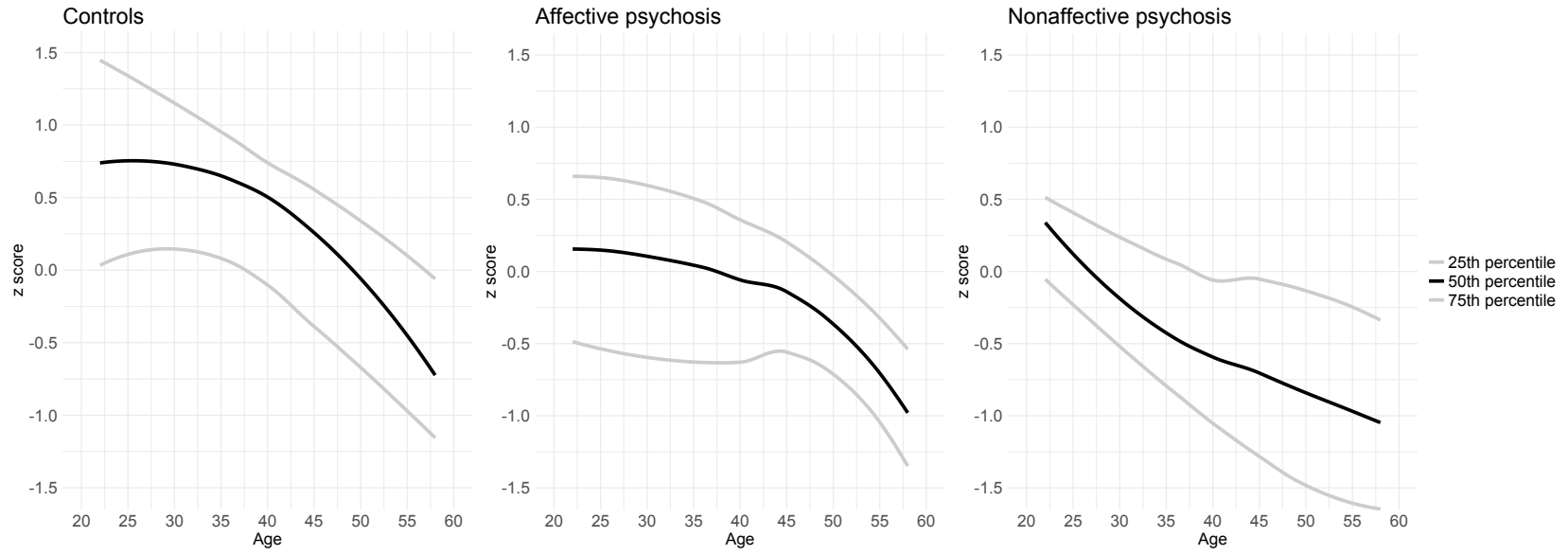
**Table S1** Cognitive Test Battery (Charlie)

Domain	Measure	Description
General cognitive ability	g	First component of principal component analyses using all cognitive measures listed below.
General verbal knowledge	Wechsler Test of Adult Reading	Subjects read aloud a list of 50 irregularly spelled words.
Language	WASI Vocabulary	Subjects answer questions about the meaning of words (e.g., What does winter mean?).
Abstract reasoning	WASI Matrix	Subjects view an incomplete matrix and select the response that completes the matrix.
Verbal and semantic fluency	Controlled Oral Word Association Test	Subjects list as many words as possible in 60 seconds. In the first three trials, the words must begin with the letters, F, A, and S (verbal fluency). In the fourth trial, the words must be animals (semantic fluency).
Processing speed & executive function	Trail-Making A & B	Subjects click on circles presented on the screen in a specified order. In Trail-Making A, the order is consecutive numbers, starting with 1. In Trail-Making B, the order is alternating numbers and letters.
Processing speed	Digit Symbol Coding Test	A key of digit symbol pairs is presented at the top of the screen and subjects indicate whether a target digit symbol pair presented at the center of the screen matches any pair from the key. Subjects complete as many trials as possible in 90 seconds.
Verbal memory	California Verbal Learning Test	Subjects hear an audio recording of 16 words, and repeat out loud as many words as they can recall. This is repeated for five trials (learning condition). On the sixth trial (recall condition), subjects list as many words as they can recall without first hearing the audio recording. In the recognition condition, subjects recognize the 16 target words presented alongside 32 non-target words.
Working memory	Span forward & backward	Subjects hear sequences of letters or numbers that increase in length throughout the trials and repeat these sequences out loud. In the forward condition, subjects repeat the sequences in the order in which they heard them. In the backward condition, subjects repeat the sequences in reverse order.
	Letter number sequencing	Same as above, but the sequences contain both letters and numbers and subjects repeat the letters in numerical order, followed by the letters in alphabetical order.

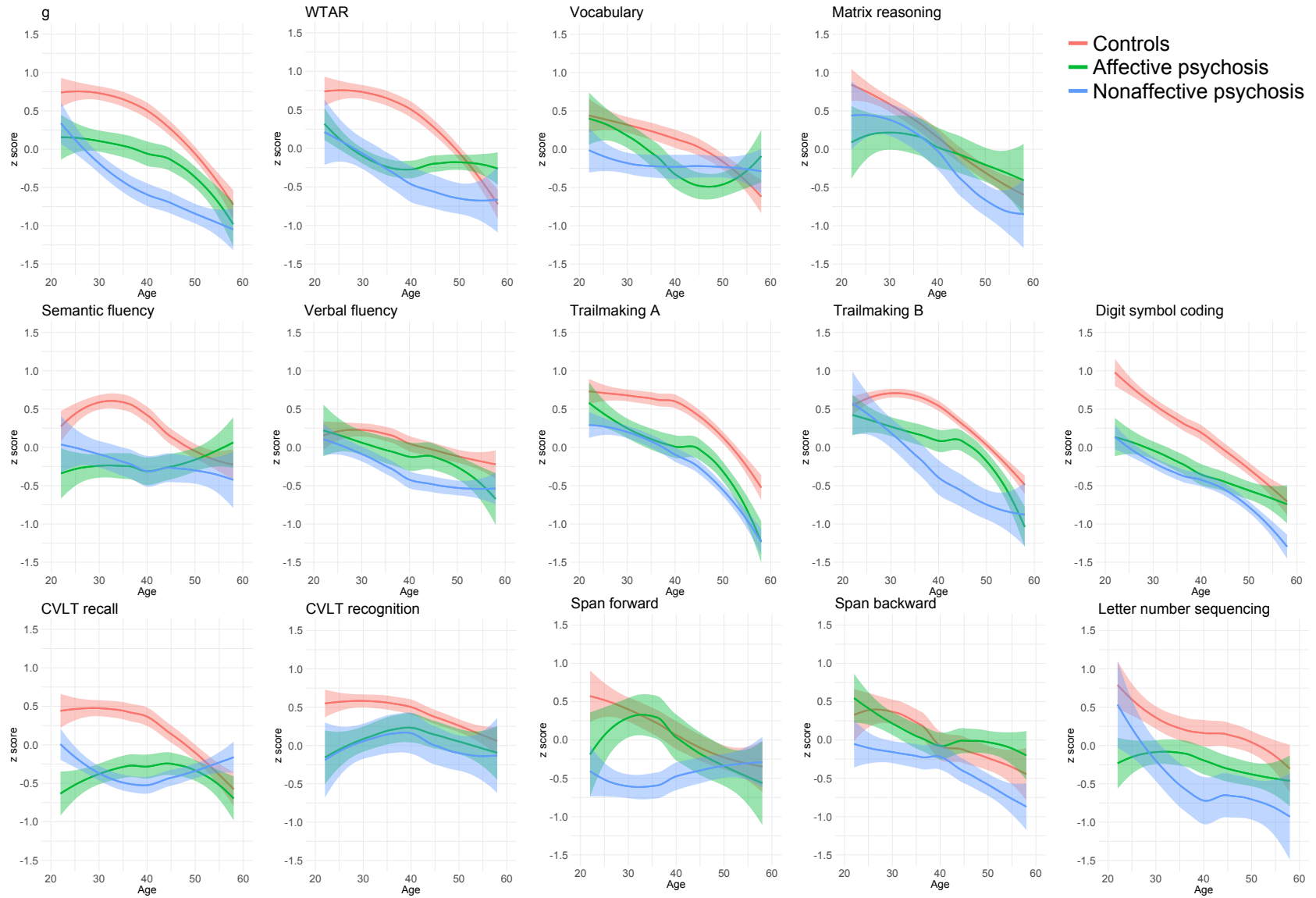
**Figure S1** Correlations between all cognitive measures and age



**Figure S2** *g* charts for all groups



**Figure S3** Cognitive charts for control, affective psychosis and nonaffective psychosis groups with local regression smoothing



**Table S2** Fit indices of alternative statistical models\*

Statistical model	AIC	BIC
Age as a linear function	36.1	55.1
<b>Age as a natural cubic spline with three knots</b>	<b>15.7</b>	<b>42.8</b>
Age as a natural cubic spline with four knots	16.8	52.0
No age-by-group interaction	31.4	47.6

AIC: Akaike information criterion; BIC: Bayesian information criterion

\*Boded model indicates model with best fit

**Table S3** Group and group-by-age interaction effects of regression analyses adjusting for sex and antipsychotic medication

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.21</b>	<b>0.002</b>	<b>0.013</b>	0.49	0.182	0.364	<b>0.63</b>	<b>0.002</b>	<b>0.006</b>
WTAR	<b>-0.17</b>	<b>0.015</b>	<b>0.035</b>	0.43	0.285	0.423	<b>0.77</b>	<b>0.001</b>	<b>0.003</b>
Vocabulary	-0.04	0.539	0.539	-0.76	0.056	0.130	<b>0.51</b>	<b>0.019</b>	<b>0.043</b>
Matrix reasoning	0.08	0.395	0.425	<b>1.26</b>	<b>0.021</b>	0.114	0.57	0.056	0.111
Semantic fluency	<b>-0.16</b>	<b>0.042</b>	0.059	<b>0.93</b>	<b>0.033</b>	0.114	<b>1.17</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	<b>0.16</b>	<b>0.004</b>	<b>0.014</b>	-0.27	0.423	0.494	-0.14	0.459	0.536
Trail-Making A	<b>-0.11</b>	<b>0.021</b>	<b>0.042</b>	-0.31	0.302	0.423	-0.20	0.224	0.285
Trail-Making B	<b>-0.15</b>	<b>0.042</b>	0.059	0.35	0.371	0.472	0.27	0.209	0.285
Digit symbol coding	<b>-0.16</b>	<b>0.003</b>	<b>0.013</b>	0.07	0.803	0.803	<b>0.67</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recall	<b>-0.18</b>	<b>0.012</b>	<b>0.035</b>	<b>1.81</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.61</b>	<b>0.002</b>	<b>0.005</b>
CVLT recognition	-0.11	0.137	0.174	<b>1.00</b>	<b>0.026</b>	0.114	0.42	0.088	0.137
Span forward	0.10	0.333	0.389	0.71	0.216	0.379	-0.03	0.921	0.921
Span backward	<b>0.22</b>	<b>0.003</b>	<b>0.013</b>	0.16	0.711	0.765	0.43	0.078	0.136
Letter number sequencing	<b>-0.21</b>	<b>0.029</b>	0.051	1.08	0.054	0.130	0.16	0.607	0.654
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.35</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.99</b>	<b>0.007</b>	0.052	<b>0.49</b>	<b>0.015</b>	0.050
WTAR	<b>-0.38</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.23	0.573	0.730	0.17	0.426	0.542
Vocabulary	-0.10	0.143	0.167	0.65	0.103	0.230	<b>0.75</b>	<b>0.001</b>	<b>0.004</b>
Matrix reasoning	-0.14	0.123	0.157	0.15	0.774	0.827	-0.10	0.732	0.732
Semantic fluency	-0.13	0.104	0.145	0.12	0.774	0.827	<b>0.56</b>	<b>0.018</b>	0.050
Verbal fluency	0.00	0.955	0.955	-0.54	0.115	0.230	-0.20	0.271	0.474
Trail-Making A	<b>-0.25</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.37	0.220	0.386	-0.31	0.060	0.139
Trail-Making B	<b>-0.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.58</b>	<b>&lt;0.001</b>	<b>0.002</b>	-0.18	0.401	0.542
Digit symbol coding	<b>-0.20</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.29	0.323	0.503	0.19	0.230	0.461
CVLT recall	<b>-0.18</b>	<b>0.015</b>	<b>0.024</b>	0.26	0.457	0.639	<b>1.18</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.20</b>	<b>0.007</b>	<b>0.014</b>	<b>0.89</b>	<b>0.047</b>	0.143	0.25	0.312	0.485
Span forward	<b>-0.25</b>	<b>0.014</b>	<b>0.024</b>	<b>1.32</b>	<b>0.022</b>	0.104	<b>0.98</b>	<b>0.002</b>	<b>0.010</b>
Span backward	-0.08	0.258	0.278	0.10	0.827	0.827	0.17	0.487	0.558
Letter number sequencing	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-1.10	0.051	0.143	-0.20	0.518	0.558

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S4** Group and group-by-age interaction effects of regression analyses adjusting for sex and cannabis use

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.50</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.37	0.279	0.688	<b>0.61</b>	<b>0.001</b>	<b>0.005</b>
WTAR	-0.16	0.054	0.095	0.43	0.355	0.711	<b>0.95</b>	<b>&lt;0.001</b>	<b>0.002</b>
Vocabulary	<b>-0.22</b>	<b>0.004</b>	<b>0.009</b>	-0.57	0.160	0.688	<b>0.65</b>	<b>0.004</b>	<b>0.011</b>
Matrix reasoning	-0.16	0.110	0.171	<b>1.29</b>	<b>0.025</b>	0.177	0.58	0.065	0.152
Semantic fluency	<b>-0.42</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.48	0.295	0.688	<b>1.07</b>	<b>&lt;0.001</b>	<b>0.001</b>
Verbal fluency	<b>-0.22</b>	<b>&lt;0.001</b>	<b>0.001</b>	-0.18	0.624	0.991	-0.01	0.975	0.975
Trail-Making A	0.04	0.665	0.748	-0.01	0.984	0.991	-0.08	0.806	0.887
Trail-Making B	<b>-0.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.09	0.848	0.991	0.05	0.824	0.887
Digit symbol coding	<b>-0.45</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.72</b>	<b>0.014</b>	0.177	<b>0.52</b>	<b>0.001</b>	<b>0.005</b>
CVLT recall	0.03	0.670	0.748	-0.03	0.957	0.991	-0.18	0.521	0.802
CVLT recognition	-0.02	0.814	0.814	0.15	0.778	0.991	-0.11	0.720	0.887
Span forward	0.04	0.680	0.748	-0.01	0.991	0.991	-0.20	0.573	0.802
Span backward	0.03	0.695	0.748	0.13	0.804	0.991	0.17	0.561	0.802
Letter number sequencing	<b>-0.47</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.55	0.289	0.688	0.25	0.378	0.756
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.74</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.75</b>	<b>0.031</b>	0.213	<b>0.82</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
WTAR	<b>-0.36</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.51	0.276	0.553	0.12	0.631	0.747
Vocabulary	<b>-0.25</b>	<b>0.001</b>	<b>0.002</b>	0.67	0.099	0.277	<b>1.03</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Matrix reasoning	<b>-0.28</b>	<b>0.004</b>	<b>0.006</b>	0.04	0.949	0.949	-0.15	0.640	0.747
Semantic fluency	<b>-0.43</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.08	0.865	0.949	<b>0.57</b>	<b>0.025</b>	0.117
Verbal fluency	<b>-0.36</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.55	0.130	0.304	0.14	0.480	0.747
Trail-Making A	0.01	0.943	0.943	0.06	0.915	0.949	0.10	0.747	0.805
Trail-Making B	<b>-0.55</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.39</b>	<b>0.002</b>	<b>0.031</b>	0.36	0.135	0.471
Digit symbol coding	<b>-0.59</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.51	0.080	0.277	0.17	0.284	0.747
CVLT recall	0.02	0.845	0.910	-0.08	0.883	0.949	-0.17	0.535	0.747
CVLT recognition	-0.02	0.816	0.910	-0.04	0.934	0.949	-0.22	0.448	0.747
Span forward	0.08	0.477	0.668	-0.06	0.933	0.949	-0.21	0.554	0.747
Span backward	0.05	0.539	0.687	0.07	0.901	0.949	-0.04	0.890	0.890
Letter number sequencing	<b>-0.62</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.05</b>	<b>0.046</b>	0.213	0.15	0.604	0.747

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S5** Group and group-by-age interaction effects of regression analyses adjusting for sex and psychiatric comorbidity

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	-0.11	0.101	0.177	<b>0.78</b>	<b>0.025</b>	0.088	0.39	0.039	0.078
WTAR	0.09	0.204	0.285	0.72	0.081	0.113	<b>0.89</b>	<b>&lt;0.001</b>	<b>0.001</b>
Vocabulary	0.00	0.972	0.972	-0.70	0.067	0.104	<b>0.62</b>	<b>0.003</b>	<b>0.009</b>
Matrix reasoning	0.04	0.684	0.798	<b>1.42</b>	<b>0.009</b>	<b>0.043</b>	0.44	0.132	0.231
Semantic fluency	<b>-0.21</b>	<b>0.010</b>	<b>0.023</b>	0.88	0.055	0.103	<b>1.15</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	0.04	0.542	0.689	0.13	0.721	0.841	-0.18	0.365	0.511
Trail-Making A	-0.13	0.057	0.113	-0.03	0.950	0.950	-0.13	0.555	0.618
Trail-Making B	-0.10	0.175	0.272	0.46	0.296	0.377	0.09	0.708	0.708
Digit symbol coding	<b>-0.15</b>	<b>0.003</b>	<b>0.018</b>	<b>1.05</b>	<b>&lt;0.001</b>	<b>0.001</b>	<b>0.51</b>	<b>0.001</b>	<b>0.003</b>
CVLT recall	<b>-0.25</b>	<b>0.001</b>	<b>0.010</b>	<b>1.77</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.83</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.21</b>	<b>0.009</b>	<b>0.023</b>	0.98	0.043	0.103	0.33	0.212	0.330
Span forward	0.01	0.935	0.972	1.14	0.046	0.103	-0.17	0.574	0.618
Span backward	<b>0.18</b>	<b>0.006</b>	<b>0.022</b>	0.04	0.916	0.950	<b>0.58</b>	<b>0.009</b>	<b>0.021</b>
Letter number sequencing	<b>-0.25</b>	<b>0.006</b>	<b>0.022</b>	0.99	0.059	0.103	0.23	0.420	0.535

Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.58</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.86</b>	<b>0.014</b>	0.072	<b>0.72</b>	<b>&lt;0.001</b>	<b>0.001</b>
WTAR	<b>-0.19</b>	<b>0.011</b>	<b>0.013</b>	-0.40	0.334	0.519	0.21	0.345	0.483
Vocabulary	-0.13	0.049	0.053	0.38	0.318	0.519	<b>0.81</b>	<b>&lt;0.001</b>	<b>0.001</b>
Matrix reasoning	-0.18	0.056	0.056	-0.33	0.541	0.642	-0.24	0.419	0.534
Semantic fluency	<b>-0.30</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.05	0.914	0.914	<b>0.57</b>	<b>0.024</b>	0.068
Verbal fluency	<b>-0.24</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.81</b>	<b>0.028</b>	0.097	0.09	0.643	0.750
Trail-Making A	<b>-0.38</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.34	0.405	0.567	-0.34	0.127	0.255
Trail-Making B	<b>-0.47</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.38</b>	<b>0.002</b>	<b>0.031</b>	0.06	0.812	0.874
Digit symbol coding	<b>-0.49</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.14	0.596	0.642	0.25	0.096	0.223
CVLT recall	<b>-0.28</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.36	0.303	0.519	<b>1.24</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.29</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.76	0.117	0.272	0.27	0.312	0.483
Span forward	<b>-0.43</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.39</b>	<b>0.015</b>	0.072	<b>0.98</b>	<b>0.002</b>	<b>0.007</b>
Span backward	<b>-0.29</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.22	0.573	0.642	0.22	0.312	0.483
Letter number sequencing	<b>-0.48</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.96	0.068	0.190	0.00	0.992	0.992

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)



**Table S6** Group and group-by-age interaction effects of regression analyses adjusting for sex and current substance dependence

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.47</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.38	0.287	0.447	0.38	0.048	0.112
WTAR	<b>-0.20</b>	<b>0.005</b>	<b>0.007</b>	0.37	0.360	0.505	<b>0.76</b>	<b>0.001</b>	<b>0.003</b>
Vocabulary	<b>-0.24</b>	<b>0.003</b>	<b>0.005</b>	<b>-1.18</b>	<b>0.007</b>	<b>0.046</b>	<b>0.61</b>	<b>0.010</b>	<b>0.027</b>
Matrix reasoning	-0.13	0.152	0.164	<b>1.41</b>	<b>0.010</b>	<b>0.047</b>	0.53	0.074	0.149
Semantic fluency	<b>-0.44</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.49	0.276	0.447	<b>0.96</b>	<b>&lt;0.001</b>	<b>0.001</b>
Verbal fluency	<b>-0.15</b>	<b>0.010</b>	<b>0.013</b>	-0.21	0.564	0.658	-0.29	0.148	0.231
Trail-Making A	<b>-0.42</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.26	0.438	0.558	-0.20	0.265	0.337
Trail-Making B	<b>-0.33</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.05	0.903	0.903	0.02	0.912	0.912
Digit symbol coding	<b>-0.45</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.67</b>	<b>0.021</b>	0.075	<b>0.52</b>	<b>0.001</b>	<b>0.004</b>
CVLT recall	<b>-0.52</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.46</b>	<b>&lt;0.001</b>	<b>0.001</b>	<b>0.85</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.34</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.92	0.058	0.164	0.32	0.227	0.318
Span forward	-0.17	0.097	0.113	0.93	0.110	0.257	-0.20	0.519	0.606
Span backward	0.01	0.883	0.883	-0.08	0.850	0.903	0.41	0.086	0.151
Letter number sequencing	<b>-0.46</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.70	0.256	0.447	0.13	0.690	0.743
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.80</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.77</b>	<b>0.030</b>	0.105	<b>0.58</b>	<b>0.003</b>	<b>0.011</b>
WTAR	<b>-0.38</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.07	0.868	0.868	0.17	0.450	0.692
Vocabulary	<b>-0.22</b>	<b>0.006</b>	<b>0.006</b>	0.74	0.085	0.239	<b>0.84</b>	<b>&lt;0.001</b>	<b>0.002</b>
Matrix reasoning	<b>-0.26</b>	<b>0.005</b>	<b>0.006</b>	0.18	0.743	0.800	-0.10	0.723	0.841
Semantic fluency	<b>-0.42</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.35	0.438	0.682	<b>0.63</b>	<b>0.011</b>	<b>0.030</b>
Verbal fluency	<b>-0.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.37	0.306	0.611	0.12	0.544	0.692
Trail-Making A	<b>-0.59</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.14	0.674	0.787	-0.16	0.381	0.667
Trail-Making B	<b>-0.58</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.32</b>	<b>0.001</b>	<b>0.019</b>	0.06	0.781	0.841
Digit symbol coding	<b>-0.61</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.76</b>	<b>0.009</b>	0.053	0.23	0.136	0.317
CVLT recall	<b>-0.47</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.15	0.671	0.787	<b>1.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.78	0.108	0.252	0.25	0.340	0.667
Span forward	<b>-0.55</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.48</b>	<b>0.011</b>	0.053	<b>1.15</b>	<b>&lt;0.001</b>	<b>0.002</b>
Span backward	<b>-0.44</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.37	0.390	0.682	0.15	0.531	0.692
Letter number sequencing	<b>-0.54</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.29	0.633	0.787	-0.04	0.895	0.895

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S7** Group and group-by-age interaction effects of regression analyses adjusting for sex and lifetime substance dependence

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.31</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.83</b>	<b>0.024</b>	0.069	0.25	0.210	0.294
WTAR	0.03	0.621	0.621	0.55	0.179	0.279	<b>0.83</b>	<b>&lt;0.001</b>	<b>0.001</b>
Vocabulary	<b>-0.15</b>	<b>0.036</b>	0.056	<b>-1.07</b>	<b>0.007</b>	<b>0.033</b>	0.39	0.071	0.165
Matrix reasoning	-0.07	0.446	0.480	<b>1.18</b>	<b>0.025</b>	0.069	0.38	0.181	0.281
Semantic fluency	<b>-0.42</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.54	0.227	0.317	<b>1.10</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	-0.08	0.172	0.241	-0.11	0.748	0.748	-0.37	0.055	0.154
Trail-Making A	<b>-0.35</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.35	0.382	0.486	-0.33	0.135	0.236
Trail-Making B	<b>-0.25</b>	<b>0.001</b>	<b>0.002</b>	0.21	0.624	0.672	-0.01	0.970	0.970
Digit symbol coding	<b>-0.36</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.89</b>	<b>0.004</b>	<b>0.027</b>	0.27	0.105	0.210
CVLT recall	<b>-0.36</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.94</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.72</b>	<b>&lt;0.001</b>	<b>0.001</b>
CVLT recognition	<b>-0.22</b>	<b>0.004</b>	<b>0.007</b>	<b>0.92</b>	<b>0.049</b>	0.114	0.27	0.293	0.373
Span forward	-0.13	0.209	0.266	0.90	0.126	0.231	-0.21	0.515	0.601
Span backward	0.08	0.257	0.300	0.24	0.580	0.672	<b>0.56</b>	<b>0.019</b>	0.068
Letter number sequencing	<b>-0.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.82	0.132	0.231	0.05	0.859	0.925

Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.71</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.43	0.234	0.547	<b>0.59</b>	<b>0.003</b>	<b>0.016</b>
WTAR	<b>-0.19</b>	<b>0.010</b>	<b>0.010</b>	-0.31	0.447	0.626	0.18	0.417	0.584
Vocabulary	<b>-0.19</b>	<b>0.006</b>	<b>0.007</b>	0.56	0.152	0.533	<b>0.52</b>	<b>0.016</b>	0.056
Matrix reasoning	<b>-0.24</b>	<b>0.006</b>	<b>0.007</b>	-0.06	0.910	0.910	-0.29	0.302	0.582
Semantic fluency	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.07	0.868	0.910	<b>0.52</b>	<b>0.034</b>	0.082
Verbal fluency	<b>-0.29</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.72</b>	<b>0.042</b>	0.198	-0.09	0.629	0.734
Trail-Making A	<b>-0.53</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.30	0.444	0.626	<b>-0.46</b>	<b>0.035</b>	0.082
Trail-Making B	<b>-0.53</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.27</b>	<b>0.003</b>	<b>0.044</b>	-0.02	0.916	0.916
Digit symbol coding	<b>-0.57</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.26	0.398	0.626	0.07	0.683	0.735
CVLT recall	<b>-0.43</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.37	0.298	0.596	<b>1.19</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.58	0.208	0.547	0.22	0.382	0.584
Span forward	<b>-0.54</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.37</b>	<b>0.020</b>	0.143	<b>1.14</b>	<b>0.001</b>	<b>0.004</b>
Span backward	<b>-0.38</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.07	0.870	0.910	0.23	0.333	0.582
Letter number sequencing	<b>-0.50</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.30	0.587	0.747	-0.17	0.569	0.725

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S8** Group and group-by-age interaction effects of regression analyses adjusting for sex and symptom severity

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	-0.06	0.310	0.543	<b>0.82</b>	<b>0.015</b>	0.069	0.27	0.140	0.244
WTAR	-0.06	0.400	0.617	0.63	0.130	0.303	<b>0.70</b>	<b>0.002</b>	<b>0.013</b>
Vocabulary	-0.02	0.770	0.770	<b>-0.96</b>	<b>0.026</b>	0.073	0.46	0.050	0.125
Matrix reasoning	0.12	0.201	0.469	<b>1.29</b>	<b>0.025</b>	0.073	0.39	0.205	0.319
Semantic fluency	-0.05	0.492	0.626	0.09	0.831	0.831	<b>1.07</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	<b>0.13</b>	<b>0.027</b>	0.113	-0.51	0.175	0.351	-0.15	0.452	0.487
Trail-Making A	0.03	0.615	0.672	-0.36	0.247	0.432	-0.32	0.062	0.125
Trail-Making B	0.03	0.624	0.672	0.31	0.410	0.521	-0.12	0.565	0.565
Digit symbol coding	<b>0.16</b>	<b>0.001</b>	<b>0.004</b>	0.25	0.325	0.456	<b>0.41</b>	<b>0.003</b>	<b>0.013</b>
CVLT recall	-0.06	0.441	0.617	<b>1.87</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.40</b>	<b>0.045</b>	0.125
CVLT recognition	-0.09	0.235	0.470	<b>1.22</b>	<b>0.011</b>	0.069	0.24	0.345	0.439
Span forward	0.21	0.032	0.113	0.59	0.287	0.446	-0.23	0.452	0.487
Span backward	<b>0.28</b>	<b>&lt;0.001</b>	<b>0.002</b>	-0.11	0.798	0.831	0.46	0.058	0.125
Letter number sequencing	-0.11	0.201	0.469	0.21	0.684	0.798	0.33	0.255	0.356
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.30</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.44	0.183	0.365	<b>0.44</b>	<b>0.017</b>	<b>0.048</b>
WTAR	<b>-0.25</b>	<b>&lt;0.001</b>	<b>0.002</b>	0.08	0.855	0.855	0.10	0.648	0.825
Vocabulary	-0.02	0.751	0.751	<b>1.09</b>	<b>0.011</b>	<b>0.039</b>	<b>0.65</b>	<b>0.006</b>	<b>0.028</b>
Matrix reasoning	-0.06	0.530	0.571	0.41	0.469	0.656	-0.22	0.486	0.690
Semantic fluency	-0.06	0.371	0.520	0.20	0.627	0.767	<b>0.70</b>	<b>0.002</b>	<b>0.013</b>
Verbal fluency	-0.05	0.439	0.558	-0.40	0.287	0.446	0.02	0.939	0.939
Trail-Making A	<b>-0.17</b>	<b>0.001</b>	<b>0.004</b>	-0.14	0.657	0.767	-0.29	0.095	0.223
Trail-Making B	<b>-0.30</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.19</b>	<b>0.002</b>	<b>0.011</b>	0.14	0.493	0.690
Digit symbol coding	0.03	0.491	0.571	<b>0.99</b>	<b>&lt;0.001</b>	<b>0.002</b>	0.04	0.743	0.867
CVLT recall	-0.07	0.344	0.520	0.68	0.061	0.143	<b>1.25</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.24</b>	<b>0.003</b>	<b>0.008</b>	<b>1.07</b>	<b>0.025</b>	<b>0.071</b>	0.20	0.434	0.690
Span forward	<b>-0.24</b>	<b>0.015</b>	<b>0.035</b>	<b>1.50</b>	<b>0.007</b>	<b>0.035</b>	<b>0.77</b>	<b>0.011</b>	<b>0.039</b>
Span backward	-0.12	0.093	0.187	0.14	0.749	0.806	0.03	0.915	0.939
Letter number sequencing	-0.13	0.136	0.238	-0.62	0.239	0.418	-0.35	0.221	0.442

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S9** Group and group-by-age interaction effects of regression analyses adjusting for sex and duration of psychosis

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	-0.13	0.052	0.125	<b>1.19</b>	<b>0.001</b>	<b>0.002</b>	<b>0.44</b>	<b>0.018</b>	<b>0.033</b>
WTAR	-0.04	0.590	0.751	<b>0.81</b>	<b>0.035</b>	0.071	<b>0.82</b>	<b>&lt;0.001</b>	<b>0.001</b>
Vocabulary	0.02	0.726	0.847	-0.32	0.412	0.481	<b>0.63</b>	<b>0.004</b>	<b>0.013</b>
Matrix reasoning	0.07	0.410	0.574	<b>1.66</b>	<b>0.001</b>	<b>0.005</b>	<b>0.66</b>	<b>0.019</b>	<b>0.033</b>
Semantic fluency	<b>-0.21</b>	<b>0.011</b>	0.075	<b>0.97</b>	<b>0.026</b>	0.062	<b>1.24</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	0.12	0.053	0.125	0.24	0.519	0.559	-0.11	0.600	0.700
Trail-Making A	0.00	0.984	0.984	0.33	0.404	0.481	0.03	0.896	0.896
Trail-Making B	0.07	0.258	0.401	<b>0.77</b>	<b>0.048</b>	0.071	0.18	0.399	0.507
Digit symbol coding	0.11	0.090	0.181	<b>1.80</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.48</b>	<b>0.010</b>	<b>0.027</b>
CVLT recall	<b>-0.28</b>	<b>0.001</b>	<b>0.008</b>	<b>2.03</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.81</b>	<b>&lt;0.001</b>	<b>0.001</b>
CVLT recognition	<b>-0.18</b>	<b>0.026</b>	0.091	<b>1.28</b>	<b>0.007</b>	<b>0.019</b>	<b>0.53</b>	<b>0.038</b>	0.059
Span forward	0.01	0.938	0.984	1.16	0.050	0.071	-0.09	0.787	0.848
Span backward	<b>0.17</b>	<b>0.018</b>	0.084	0.13	0.758	0.758	<b>0.56</b>	<b>0.019</b>	<b>0.033</b>
Letter number sequencing	-0.12	0.177	0.310	<b>1.09</b>	<b>0.046</b>	0.071	0.26	0.378	0.507
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.44</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.40	0.237	0.414	<b>0.81</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
WTAR	<b>-0.24</b>	<b>&lt;0.001</b>	<b>0.002</b>	0.07	0.855	0.921	0.24	0.239	0.371
Vocabulary	-0.07	0.325	0.350	0.77	0.051	0.180	<b>0.95</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Matrix reasoning	-0.07	0.442	0.442	0.50	0.325	0.455	-0.02	0.939	0.939
Semantic fluency	<b>-0.32</b>	<b>&lt;0.001</b>	<b>0.001</b>	0.08	0.853	0.921	<b>0.55</b>	<b>0.022</b>	0.062
Verbal fluency	-0.11	0.085	0.108	-0.03	0.943	0.943	0.17	0.411	0.576
Trail-Making A	<b>-0.16</b>	<b>0.012</b>	<b>0.016</b>	0.40	0.315	0.455	-0.03	0.892	0.939
Trail-Making B	<b>-0.28</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.62	0.108	0.221	0.07	0.742	0.866
Digit symbol coding	-0.10	0.102	0.119	<b>1.43</b>	<b>&lt;0.001</b>	<b>0.001</b>	0.35	0.059	0.138
CVLT recall	<b>-0.25</b>	<b>0.002</b>	<b>0.004</b>	0.68	0.068	0.190	<b>1.38</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.21</b>	<b>0.008</b>	<b>0.012</b>	<b>1.19</b>	<b>0.012</b>	0.056	0.44	0.088	0.176
Span forward	<b>-0.35</b>	<b>0.002</b>	<b>0.004</b>	<b>1.89</b>	<b>0.002</b>	<b>0.012</b>	<b>1.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Span backward	<b>-0.21</b>	<b>0.005</b>	<b>0.009</b>	0.70	0.111	0.221	0.32	0.173	0.303
Letter number sequencing	<b>-0.25</b>	<b>0.006</b>	<b>0.010</b>	0.12	0.828	0.921	0.14	0.643	0.818

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S10** Group and group-by-age interaction effects of regression analyses adjusting for sex and education

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.22</b>	<b>0.001</b>	<b>0.002</b>	<b>0.88</b>	<b>0.017</b>	<b>0.047</b>	0.32	0.109	0.218
WTAR	-0.02	0.795	0.795	-0.56	0.275	0.427	<b>0.65</b>	<b>0.023</b>	0.081
Vocabulary	-0.10	0.171	0.199	<b>-1.22</b>	<b>0.004</b>	<b>0.028</b>	<b>0.52</b>	<b>0.023</b>	0.081
Matrix reasoning	-0.06	0.526	0.567	<b>1.48</b>	<b>0.009</b>	<b>0.033</b>	0.22	0.462	0.647
Semantic fluency	<b>-0.39</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.09	0.837	0.901	<b>0.73</b>	<b>0.002</b>	<b>0.012</b>
Verbal fluency	-0.10	0.115	0.161	<b>-1.10</b>	<b>0.006</b>	<b>0.028</b>	-0.18	0.413	0.643
Trail-Making A	<b>-0.29</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.81</b>	<b>0.044</b>	0.088	0.05	0.828	0.828
Trail-Making B	<b>-0.19</b>	<b>0.009</b>	<b>0.016</b>	-0.18	0.680	0.793	-0.08	0.721	0.806
Digit symbol coding	<b>-0.33</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.35	0.217	0.380	<b>0.33</b>	<b>0.034</b>	0.096
CVLT recall	<b>-0.46</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.13</b>	<b>0.001</b>	<b>0.007</b>	0.32	0.063	0.148
CVLT recognition	<b>-0.20</b>	<b>0.009</b>	<b>0.016</b>	<b>1.02</b>	<b>0.026</b>	0.060	0.30	0.222	0.388
Span forward	-0.15	0.132	0.168	-0.04	0.942	0.942	-0.10	0.748	0.806
Span backward	<b>0.14</b>	<b>0.028</b>	<b>0.043</b>	0.37	0.313	0.438	<b>0.64</b>	<b>0.002</b>	<b>0.012</b>
Letter number sequencing	<b>-0.28</b>	<b>0.001</b>	<b>0.003</b>	-0.28	0.575	0.731	0.17	0.528	0.672

Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.60</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.62	0.091	0.212	0.15	0.447	0.521
WTAR	-0.12	0.155	0.155	-0.24	0.638	0.744	0.09	0.739	0.795
Vocabulary	<b>-0.16</b>	<b>0.031</b>	<b>0.033</b>	0.50	0.229	0.356	0.33	0.151	0.427
Matrix reasoning	<b>-0.23</b>	<b>0.017</b>	<b>0.020</b>	0.20	0.719	0.775	-0.38	0.211	0.427
Semantic fluency	<b>-0.35</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.29	0.481	0.612	0.39	0.089	0.414
Verbal fluency	<b>-0.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.75	0.059	0.206	0.05	0.804	0.804
Trail-Making A	<b>-0.48</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.34	0.393	0.550	-0.24	0.275	0.427
Trail-Making B	<b>-0.49</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.01</b>	<b>0.021</b>	0.206	-0.24	0.314	0.439
Digit symbol coding	<b>-0.48</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.46	0.108	0.216	-0.20	0.196	0.427
CVLT recall	<b>-0.41</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.09	0.777	0.777	<b>0.84</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.25</b>	<b>0.001</b>	<b>0.001</b>	0.67	0.142	0.248	0.21	0.389	0.495
Span forward	<b>-0.49</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.22</b>	<b>0.033</b>	0.206	<b>0.98</b>	<b>0.002</b>	<b>0.013</b>
Span backward	<b>-0.26</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.72	0.053	0.206	0.22	0.268	0.427
Letter number sequencing	<b>-0.45</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.86	0.087	0.212	-0.31	0.254	0.427

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S11** Group and group-by-age interaction effects of regression analyses adjusting for sex and maternal education

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.69	0.089	0.303	0.19	0.379	0.590
WTAR	0.09	0.322	0.322	0.56	0.298	0.463	0.39	0.182	0.364
Vocabulary	0.12	0.185	0.216	-0.36	0.512	0.652	0.55	0.073	0.203
Matrix reasoning	<b>-0.25</b>	<b>0.017</b>	<b>0.027</b>	<b>2.06</b>	<b>0.001</b>	<b>0.009</b>	0.09	0.789	0.910
Semantic fluency	<b>-0.36</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.15	0.744	0.757	0.65	0.013	0.093
Verbal fluency	-0.09	0.227	0.244	0.15	0.757	0.757	-0.20	0.442	0.619
Trail-Making A	<b>-0.34</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.68</b>	<b>0.035</b>	0.161	<b>-0.46</b>	<b>0.009</b>	0.093
Trail-Making B	<b>-0.31</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.31	0.437	0.611	0.02	0.914	0.914
Digit symbol coding	<b>-0.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.59	0.134	0.303	<b>0.43</b>	<b>0.044</b>	0.175
CVLT recall	<b>-0.39</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.24	0.623	0.727	0.25	0.335	0.586
CVLT recognition	<b>-0.27</b>	<b>0.001</b>	<b>0.001</b>	0.67	0.152	0.303	-0.38	0.139	0.324
Span forward	<b>-0.35</b>	<b>0.002</b>	<b>0.004</b>	<b>1.72</b>	<b>0.010</b>	0.069	0.07	0.845	0.910
Span backward	0.11	0.145	0.184	0.51	0.270	0.463	<b>0.50</b>	<b>0.050</b>	0.175
Letter number sequencing	<b>-0.18</b>	<b>0.034</b>	<b>0.048</b>	-0.78	0.118	0.303	-0.15	0.590	0.751
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.72</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.58	0.151	0.302	<b>0.46</b>	<b>0.037</b>	0.085
WTAR	-0.17	0.058	0.058	0.11	0.845	0.845	0.54	0.067	0.134
Vocabulary	-0.18	0.051	0.055	0.95	0.088	0.204	<b>0.70</b>	<b>0.022</b>	0.066
Matrix reasoning	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.19	0.744	0.802	-0.22	0.490	0.624
Semantic fluency	<b>-0.46</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.13</b>	<b>0.018</b>	0.052	<b>0.83</b>	<b>0.002</b>	0.012
Verbal fluency	<b>-0.42</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.42	0.373	0.522	0.30	0.241	0.375
Trail-Making A	<b>-0.49</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.34	0.284	0.442	-0.05	0.754	0.812
Trail-Making B	<b>-0.48</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.05</b>	<b>0.010</b>	<b>0.036</b>	-0.17	0.442	0.619
Digit symbol coding	<b>-0.44</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.43	0.274	0.442	-0.05	0.826	0.826
CVLT recall	<b>-0.48</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.20	0.671	0.782	<b>1.71</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.31</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.33	0.478	0.608	0.34	0.185	0.324
Span forward	<b>-0.36</b>	<b>0.002</b>	<b>0.002</b>	<b>1.88</b>	<b>0.005</b>	<b>0.036</b>	<b>0.91</b>	<b>0.012</b>	0.058
Span backward	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.21</b>	<b>0.010</b>	<b>0.036</b>	<b>0.58</b>	<b>0.023</b>	0.066
Letter number sequencing	<b>-0.73</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.38</b>	<b>0.006</b>	<b>0.036</b>	-0.14	0.597	0.696

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S12** Group and group-by-age interaction effects of regression analyses adjusting for sex and employment in past year

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.04	0.908	0.921	0.20	0.297	0.378
WTAR	-0.07	0.305	0.427	-0.04	0.921	0.921	<b>0.68</b>	<b>0.005</b>	<b>0.017</b>
Vocabulary	-0.02	0.735	0.857	<b>-1.11</b>	<b>0.006</b>	<b>0.029</b>	<b>0.47</b>	<b>0.034</b>	0.079
Matrix reasoning	-0.01	0.908	0.908	<b>1.50</b>	<b>0.004</b>	<b>0.026</b>	0.43	0.119	0.208
Semantic fluency	<b>-0.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.30	0.500	0.636	<b>1.07</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	-0.01	0.868	0.908	-0.52	0.131	0.305	-0.25	0.185	0.288
Trail-Making A	<b>-0.21</b>	<b>&lt;0.001</b>	<b>0.001</b>	<b>-0.71</b>	<b>0.046</b>	0.162	-0.04	0.824	0.824
Trail-Making B	<b>-0.23</b>	<b>0.001</b>	<b>0.002</b>	-0.50	0.201	0.402	-0.09	0.675	0.726
Digit symbol coding	<b>-0.33</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.47	0.131	0.305	<b>0.58</b>	<b>0.001</b>	<b>0.007</b>
CVLT recall	<b>-0.37</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.06</b>	<b>0.001</b>	<b>0.017</b>	<b>0.49</b>	<b>0.006</b>	<b>0.017</b>
CVLT recognition	<b>-0.16</b>	<b>0.048</b>	0.075	0.53	0.275	0.469	<b>0.52</b>	<b>0.054</b>	0.108
Span forward	-0.06	0.550	0.700	0.62	0.312	0.469	-0.40	0.234	0.327
Span backward	<b>0.18</b>	<b>0.006</b>	<b>0.010</b>	0.12	0.751	0.876	<b>0.67</b>	<b>0.001</b>	<b>0.007</b>
Letter number sequencing	<b>-0.29</b>	<b>0.001</b>	<b>0.002</b>	-0.51	0.335	0.469	-0.13	0.649	0.726
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.48</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.17</b>	<b>0.001</b>	<b>0.007</b>	0.32	0.091	0.227
WTAR	<b>-0.20</b>	<b>0.007</b>	<b>0.009</b>	-0.24	0.579	0.737	0.25	0.287	0.447
Vocabulary	-0.01	0.886	0.886	0.75	0.062	0.161	<b>0.72</b>	<b>0.001</b>	<b>0.009</b>
Matrix reasoning	-0.05	0.570	0.614	0.06	0.901	0.961	-0.21	0.453	0.634
Semantic fluency	<b>-0.33</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.02	0.961	0.961	<b>0.66</b>	<b>0.007</b>	<b>0.032</b>
Verbal fluency	<b>-0.20</b>	<b>0.001</b>	<b>0.001</b>	<b>-0.72</b>	<b>0.038</b>	0.132	0.06	0.732	0.854
Trail-Making A	<b>-0.32</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.61	0.087	0.174	0.00	0.989	0.999
Trail-Making B	<b>-0.42</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.61</b>	<b>&lt;0.001</b>	<b>0.001</b>	0.00	0.999	0.999
Digit symbol coding	<b>-0.39</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.19	0.544	0.737	0.28	0.097	0.227
CVLT recall	<b>-0.35</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.43	0.182	0.318	<b>1.17</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.17</b>	<b>0.031</b>	<b>0.036</b>	0.42	0.390	0.607	0.32	0.234	0.410
Span forward	<b>-0.38</b>	<b>0.001</b>	<b>0.001</b>	1.12	0.069	0.161	<b>0.88</b>	<b>0.009</b>	<b>0.032</b>
Span backward	<b>-0.18</b>	<b>0.005</b>	<b>0.006</b>	0.18	0.634	0.739	0.26	0.216	0.410
Letter number sequencing	<b>-0.35</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.34</b>	<b>0.012</b>	0.057	-0.19	0.512	0.652

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

**Table S13** Group and group-by-age interaction effects of regression analyses adjusting for sex and GAF score

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	0.00	0.938	0.938	0.29	0.382	0.594	<b>0.61</b>	<b>0.001</b>	<b>0.004</b>
WTAR	0.10	0.161	0.322	0.56	0.187	0.385	<b>0.63</b>	<b>0.007</b>	<b>0.021</b>
Vocabulary	0.13	0.073	0.204	<b>-0.94</b>	<b>0.021</b>	0.146	0.47	0.033	0.076
Matrix reasoning	0.07	0.419	0.627	0.87	0.116	0.385	0.39	0.199	0.279
Semantic fluency	<b>-0.18</b>	<b>0.032</b>	0.110	0.25	0.607	0.742	<b>1.25</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Verbal fluency	<b>0.15</b>	<b>0.004</b>	<b>0.025</b>	-0.30	0.338	0.591	-0.23	0.184	0.279
Trail-Making A	-0.04	0.448	0.627	-0.59	0.095	0.385	-0.08	0.660	0.754
Trail-Making B	0.01	0.901	0.938	-0.16	0.691	0.744	0.05	0.840	0.840
Digit symbol coding	0.02	0.635	0.809	-0.04	0.875	0.875	<b>0.51</b>	<b>0.001</b>	<b>0.004</b>
CVLT recall	-0.10	0.154	0.322	<b>1.22</b>	<b>0.001</b>	<b>0.008</b>	<b>0.73</b>	<b>&lt;0.001</b>	<b>0.001</b>
CVLT recognition	-0.02	0.788	0.919	0.66	0.176	0.385	0.35	0.187	0.279
Span forward	0.09	0.393	0.627	0.35	0.563	0.742	-0.26	0.441	0.561
Span backward	<b>0.22</b>	<b>0.001</b>	<b>0.015</b>	-0.52	0.193	0.385	0.42	0.059	0.118
Letter number sequencing	<b>-0.22</b>	<b>0.020</b>	0.094	0.28	0.636	0.742	0.12	0.701	0.754

Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.20</b>	<b>0.001</b>	<b>0.011</b>	-0.63	0.062	0.228	<b>0.56</b>	<b>0.003</b>	<b>0.011</b>
WTAR	-0.05	0.480	0.611	-0.03	0.941	0.990	0.17	0.472	0.660
Vocabulary	0.14	0.052	0.097	0.56	0.164	0.382	<b>0.66</b>	<b>0.003</b>	<b>0.011</b>
Matrix reasoning	0.03	0.728	0.790	-0.24	0.658	0.837	-0.28	0.349	0.611
Semantic fluency	-0.10	0.219	0.341	-0.01	0.990	0.990	0.49	0.064	0.178
Verbal fluency	-0.01	0.777	0.790	-0.62	0.051	0.228	0.00	0.998	0.998
Trail-Making A	<b>-0.14</b>	<b>0.015</b>	0.052	-0.58	0.100	0.279	-0.22	0.254	0.508
Trail-Making B	<b>-0.19</b>	<b>0.011</b>	<b>0.049</b>	<b>-1.72</b>	<b>&lt;0.001</b>	<b>0.001</b>	0.04	0.849	0.914
Digit symbol coding	<b>-0.14</b>	<b>0.003</b>	<b>0.023</b>	0.32	0.244	0.427	0.23	0.123	0.287
CVLT recall	-0.06	0.368	0.515	-0.08	0.814	0.949	<b>1.03</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	-0.02	0.790	0.790	0.59	0.225	0.427	0.21	0.432	0.660
Span forward	<b>-0.22</b>	<b>0.043</b>	0.097	1.13	0.065	0.228	<b>1.06</b>	<b>0.002</b>	<b>0.011</b>
Span backward	<b>-0.15</b>	<b>0.025</b>	0.071	0.18	0.646	0.837	-0.06	0.792	0.914
Letter number sequencing	-0.18	0.056	0.097	-0.53	0.374	0.581	-0.18	0.567	0.722

Bolded estimates signify statistical significance ( $p < 0.05$ )

GAF = Global Assessment of Functioning; WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)



**Table S14** Group and group-by-age interaction effects of regression analyses adjusting for sex and social functioning

Cognitive measure	Affective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.31</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.30	0.367	0.429	<b>0.47</b>	<b>0.011</b>	<b>0.031</b>
WTAR	-0.08	0.262	0.306	0.50	0.194	0.283	<b>0.80</b>	<b>&lt;0.001</b>	<b>0.001</b>
Vocabulary	<b>-0.20</b>	<b>0.009</b>	<b>0.015</b>	<b>-0.98</b>	<b>0.023</b>	0.064	0.51	0.031	0.062
Matrix reasoning	-0.08	0.383	0.383	<b>1.48</b>	<b>0.005</b>	<b>0.023</b>	0.58	0.043	0.075
Semantic fluency	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.70	0.124	0.227	<b>0.99</b>	<b>&lt;0.001</b>	<b>0.001</b>
Verbal fluency	-0.07	0.219	0.279	0.03	0.939	0.939	<b>-0.45</b>	<b>0.023</b>	0.054
Trail-Making A	<b>-0.24</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.52	0.130	0.227	0.16	0.391	0.498
Trail-Making B	<b>-0.18</b>	<b>0.010</b>	<b>0.016</b>	0.48	0.239	0.304	0.04	0.872	0.872
Digit symbol coding	<b>-0.26</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.23</b>	<b>&lt;0.001</b>	<b>0.001</b>	<b>0.49</b>	<b>0.004</b>	<b>0.014</b>
CVLT recall	<b>-0.44</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.35</b>	<b>&lt;0.001</b>	<b>0.001</b>	<b>0.85</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.22</b>	<b>0.003</b>	<b>0.006</b>	<b>1.11</b>	<b>0.012</b>	<b>0.043</b>	0.32	0.173	0.242
Span forward	-0.14	0.195	0.272	0.96	0.114	0.227	-0.19	0.566	0.610
Span backward	0.06	0.315	0.339	0.09	0.820	0.883	0.38	0.076	0.118
Letter number sequencing	<b>-0.39</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.71	0.202	0.283	0.20	0.512	0.597
Cognitive measure	Nonaffective psychosis								
	Group effect			Group-by-age interaction Early adulthood			Group-by-age interaction Middle adulthood		
	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$	$\beta$	$p$	$p^{FDR}$
g	<b>-0.73</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-0.72</b>	<b>0.033</b>	0.154	<b>0.75</b>	<b>&lt;0.001</b>	<b>0.001</b>
WTAR	<b>-0.35</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.06	0.884	0.951	0.14	0.495	0.630
Vocabulary	<b>-0.22</b>	<b>0.004</b>	<b>0.005</b>	0.72	0.094	0.289	<b>0.73</b>	<b>0.002</b>	<b>0.007</b>
Matrix reasoning	<b>-0.24</b>	<b>0.008</b>	<b>0.008</b>	0.01	0.990	0.990	-0.13	0.635	0.720
Semantic fluency	<b>-0.39</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.13	0.769	0.897	0.45	0.071	0.142
Verbal fluency	<b>-0.30</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.37	0.306	0.577	0.17	0.383	0.536
Trail-Making A	<b>-0.54</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.52	0.128	0.299	-0.08	0.668	0.720
Trail-Making B	<b>-0.52</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>-1.07</b>	<b>0.010</b>	0.141	0.07	0.739	0.739
Digit symbol coding	<b>-0.54</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.27	0.363	0.577	0.33	0.049	0.138
CVLT recall	<b>-0.38</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.26	0.454	0.577	<b>1.49</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
CVLT recognition	<b>-0.27</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.71	0.103	0.289	0.45	0.062	0.142
Span forward	<b>-0.53</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>1.38</b>	<b>0.023</b>	0.154	<b>1.11</b>	<b>0.001</b>	<b>0.005</b>
Span backward	<b>-0.40</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	0.32	0.418	0.577	0.22	0.314	0.489
Letter number sequencing	<b>-0.44</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	-0.42	0.445	0.577	0.33	0.281	0.489

Bolded estimates signify statistical significance ( $p < 0.05$ )

WTAR = Wechsler Test of Adult Reading; CVLT = California Verbal Learning Test

<sup>FDR</sup> Corrected for multiple testing (FDR = 0.05)

Figure S4 Scatter plot of age and duration of psychosis with fitted regression line

