

## Supplementary Tables

### Cultural engagement predicts changes in cognitive function in older adults over a 10 year period: findings from the English Longitudinal Study of Ageing

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**Table S1-A: Regression coefficients showing the effect of cultural engagement on cognition: model 1**

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	<b>0.83 ± 0.15</b>	<b>5.61</b>	<b>&lt;.001</b>	<b>0.54-1.13</b>	<b>1.17 ± 0.28</b>	<b>4.16</b>	<b>&lt;.001</b>	<b>0.62-1.73</b>
Once or twice a year	<b>1.27 ± 0.16</b>	<b>8.03</b>	<b>&lt;.001</b>	<b>0.96-1.58</b>	<b>2.02 ± 0.30</b>	<b>6.78</b>	<b>&lt;.001</b>	<b>1.44-2.61</b>
Every few months	<b>1.63 ± 0.18</b>	<b>9.24</b>	<b>&lt;.001</b>	<b>1.28-1.98</b>	<b>3.06 ± 0.34</b>	<b>8.89</b>	<b>&lt;.001</b>	<b>2.38-3.73</b>
Monthly or more	<b>1.65 ± 0.27</b>	<b>6.18</b>	<b>&lt;.001</b>	<b>1.12-2.27</b>	<b>2.23 ± 0.51</b>	<b>4.53</b>	<b>&lt;.001</b>	<b>1.32-3.33</b>
Theatre/concert/opera								
Less than once a year	<b>1.07 ± 0.16</b>	<b>6.48</b>	<b>&lt;.001</b>	<b>0.74-1.39</b>	<b>1.51 ± 0.31</b>	<b>4.86</b>	<b>&lt;.001</b>	<b>0.90-2.11</b>
Once or twice a year	<b>0.96 ± 0.16</b>	<b>6.07</b>	<b>&lt;.001</b>	<b>0.65-1.27</b>	<b>1.71 ± 0.30</b>	<b>5.66</b>	<b>&lt;.001</b>	<b>1.12-2.31</b>
Every few months	<b>1.56 ± 0.17</b>	<b>9.26</b>	<b>&lt;.001</b>	<b>1.23-1.89</b>	<b>2.49 ± 0.32</b>	<b>7.82</b>	<b>&lt;.001</b>	<b>1.87-3.11</b>
Monthly or more	<b>1.86 ± 0.24</b>	<b>7.89</b>	<b>&lt;.001</b>	<b>1.40-2.33</b>	<b>2.82 ± 0.43</b>	<b>6.52</b>	<b>&lt;.001</b>	<b>1.97-3.67</b>
Cinema								
Less than once a year	<b>0.81 ± 0.15</b>	<b>5.35</b>	<b>&lt;.001</b>	<b>0.51-1.11</b>	<b>1.64 ± 0.30</b>	<b>5.46</b>	<b>&lt;.001</b>	<b>1.05-2.23</b>
Once or twice a year	<b>1.16 ± 0.16</b>	<b>7.41</b>	<b>&lt;.001</b>	<b>0.86-1.47</b>	<b>2.07 ± 0.30</b>	<b>7.01</b>	<b>&lt;.001</b>	<b>1.49-2.65</b>
Every few months	<b>1.72 ± 0.17</b>	<b>9.98</b>	<b>&lt;.001</b>	<b>1.38-2.06</b>	<b>2.47 ± 0.33</b>	<b>7.38</b>	<b>&lt;.001</b>	<b>1.81-3.13</b>
Monthly or more	<b>1.45 ± 0.22</b>	<b>6.55</b>	<b>&lt;.001</b>	<b>1.02-1.88</b>	<b>1.80 ± 0.38</b>	<b>4.71</b>	<b>&lt;.001</b>	<b>1.05-2.55</b>

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=3,445. Model adjusted for baseline cognition.

**Table S1-B: Regression coefficients showing the effect of cultural engagement on cognition: model 2**

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	<b>0.33 ± 0.14</b>	<b>2.35</b>	<b>.019</b>	<b>0.06-0.60</b>	<b>0.43 ± 0.28</b>	<b>1.55</b>	<b>.12</b>	<b>-0.12-0.98</b>
Once or twice a year	<b>0.71 ± 0.15</b>	<b>4.67</b>	<b>&lt;.001</b>	<b>0.41-1.00</b>	<b>1.30 ± 0.30</b>	<b>4.36</b>	<b>&lt;.001</b>	<b>0.72-1.89</b>
Every few months	<b>0.86 ± 0.17</b>	<b>4.95</b>	<b>&lt;.001</b>	<b>0.52-1.21</b>	<b>2.06 ± 0.35</b>	<b>5.89</b>	<b>&lt;.001</b>	<b>1.37-2.74</b>
Monthly or more	<b>0.96 ± 0.26</b>	<b>3.74</b>	<b>&lt;.001</b>	<b>0.45-1.46</b>	<b>1.51 ± 0.49</b>	<b>3.06</b>	<b>.002</b>	<b>0.54-2.48</b>
Theatre/concert/opera								
Less than once a year	<b>0.56 ± 0.16</b>	<b>3.59</b>	<b>&lt;.001</b>	<b>0.25-0.86</b>	<b>0.80 ± 0.31</b>	<b>2.59</b>	<b>.010</b>	<b>0.19-1.41</b>
Once or twice a year	<b>0.43 ± 0.15</b>	<b>2.80</b>	<b>.005</b>	<b>0.13-0.73</b>	<b>1.02 ± 0.31</b>	<b>3.32</b>	<b>.001</b>	<b>0.42-1.63</b>
Every few months	<b>0.86 ± 0.17</b>	<b>5.17</b>	<b>&lt;.001</b>	<b>0.53-1.18</b>	<b>1.59 ± 0.33</b>	<b>4.88</b>	<b>&lt;.001</b>	<b>0.95-2.23</b>
Monthly or more	<b>1.08 ± 0.23</b>	<b>4.65</b>	<b>&lt;.001</b>	<b>0.62-1.53</b>	<b>1.85 ± 0.44</b>	<b>4.17</b>	<b>&lt;.001</b>	<b>0.98-2.72</b>
Cinema								
Less than once a year	<b>0.26 ± 0.14</b>	<b>1.83</b>	<b>.067</b>	<b>-0.02-0.54</b>	<b>0.83 ± 0.30</b>	<b>2.78</b>	<b>.005</b>	<b>0.25-1.42</b>
Once or twice a year	<b>0.34 ± 0.15</b>	<b>2.23</b>	<b>.026</b>	<b>0.04-0.63</b>	<b>0.93 ± 0.30</b>	<b>3.10</b>	<b>.002</b>	<b>0.34-1.51</b>
Every few months	<b>0.75 ± 0.17</b>	<b>4.50</b>	<b>&lt;.001</b>	<b>0.42-1.07</b>	<b>1.07 ± 0.34</b>	<b>3.11</b>	<b>.002</b>	<b>0.39-1.74</b>
Monthly or more	<b>0.46 ± 0.21</b>	<b>2.16</b>	<b>.031</b>	<b>0.04-0.88</b>	<b>0.48 ± 0.39</b>	<b>1.25</b>	<b>.21</b>	<b>-0.27-1.24</b>

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=3,445. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification and wealth.

Table S1-C: Regression coefficients showing the effect of cultural engagement on cognition: model 3

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	0.25 ± 0.14	1.81	.07	-0.02-0.53	0.35 ± 0.28	1.23	.22	-0.21-0.90
Once or twice a year	<b>0.60 ± 0.15</b>	<b>3.93</b>	<b>&lt;.001</b>	<b>0.30-0.90</b>	<b>1.13 ± 0.30</b>	<b>3.74</b>	<b>&lt;.001</b>	<b>0.54-1.72</b>
Every few months	<b>0.77 ± 0.18</b>	<b>4.41</b>	<b>&lt;.001</b>	<b>0.43-1.12</b>	<b>1.91 ± 0.35</b>	<b>5.37</b>	<b>&lt;.001</b>	<b>1.21-2.60</b>
Monthly or more	<b>0.85 ± 0.26</b>	<b>3.32</b>	<b>&lt;.001</b>	<b>0.35-1.36</b>	<b>1.36 ± 0.50</b>	<b>2.74</b>	<b>.006</b>	<b>0.39-2.33</b>
Theatre/concert/opera								
Less than once a year	<b>0.47 ± 0.16</b>	<b>3.00</b>	<b>.003</b>	<b>0.16-0.78</b>	<b>0.67 ± 0.31</b>	<b>2.12</b>	<b>.034</b>	<b>0.05-1.28</b>
Once or twice a year	<b>0.33 ± 0.15</b>	<b>2.14</b>	<b>.032</b>	<b>0.03-0.63</b>	<b>0.88 ± 0.31</b>	<b>2.82</b>	<b>.005</b>	<b>0.27-1.49</b>
Every few months	<b>0.74 ± 0.17</b>	<b>4.47</b>	<b>&lt;.001</b>	<b>0.42-1.07</b>	<b>1.41 ± 0.33</b>	<b>4.22</b>	<b>&lt;.001</b>	<b>0.75-2.06</b>
Monthly or more	<b>0.94 ± 0.23</b>	<b>4.02</b>	<b>&lt;.001</b>	<b>0.48-1.40</b>	<b>1.63 ± 0.45</b>	<b>3.59</b>	<b>&lt;.001</b>	<b>0.74-2.52</b>
Cinema								
Less than once a year	0.21 ± 0.14	1.44	.15	-0.07-0.49	<b>0.73 ± 0.30</b>	<b>2.43</b>	<b>.015</b>	<b>0.14-1.32</b>
Once or twice a year	<b>0.24 ± 0.15</b>	<b>1.60</b>	<b>.11</b>	<b>-0.06-0.54</b>	<b>0.76 ± 0.30</b>	<b>2.52</b>	<b>.012</b>	<b>0.17-1.36</b>
Every few months	<b>0.67 ± 0.17</b>	<b>4.00</b>	<b>&lt;.001</b>	<b>0.34-0.99</b>	<b>0.94 ± 0.35</b>	<b>2.72</b>	<b>.007</b>	<b>0.26-1.62</b>
Monthly or more	0.35 ± 0.22	1.64	.10	-0.07-0.77	0.33 ± 0.39	0.85	.39	-0.43-1.09

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=3,445. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing and depression.

Table S1-D: Regression coefficients showing the effect of cultural engagement on cognition: model 4

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	0.19 ± 0.14	1.37	.17	-0.08-0.47	0.26 ± 0.29	0.90	.37	-0.31-0.82
Once or twice a year	<b>0.52 ± 0.15</b>	<b>3.37</b>	<b>.001</b>	<b>0.22-0.82</b>	<b>1.02 ± 0.31</b>	<b>3.30</b>	<b>.001</b>	<b>0.41-1.62</b>
Every few months	<b>0.67 ± 0.18</b>	<b>3.72</b>	<b>&lt;.001</b>	<b>0.32-1.02</b>	<b>1.75 ± 0.36</b>	<b>4.83</b>	<b>&lt;.001</b>	<b>1.04-2.46</b>
Monthly or more	<b>0.74 ± 0.26</b>	<b>2.86</b>	<b>.004</b>	<b>0.23-1.25</b>	<b>1.20 ± 0.50</b>	<b>2.39</b>	<b>.017</b>	<b>0.22-2.19</b>
Theatre/concert/opera								
Less than once a year	<b>0.41 ± 0.16</b>	<b>2.62</b>	<b>.009</b>	<b>0.10-0.72</b>	<b>0.58 ± 0.32</b>	<b>1.82</b>	<b>.069</b>	<b>-0.05-1.20</b>
Once or twice a year	0.24 ± 0.16	1.53	.13	-0.07-0.55	<b>0.74 ± 0.32</b>	<b>2.33</b>	<b>.020</b>	<b>0.12-1.37</b>
Every few months	<b>0.63 ± 0.17</b>	<b>3.66</b>	<b>&lt;.001</b>	<b>0.29-0.97</b>	<b>1.23 ± 0.34</b>	<b>3.58</b>	<b>&lt;.001</b>	<b>0.56-1.91</b>
Monthly or more	<b>0.80 ± 0.24</b>	<b>3.32</b>	<b>.001</b>	<b>0.33-1.27</b>	<b>1.41 ± 0.47</b>	<b>3.03</b>	<b>.002</b>	<b>0.50-2.32</b>
Cinema								
Less than once a year	0.16 ± 0.14	1.11	0.27	-0.12-0.44	<b>0.66 ± 0.30</b>	<b>2.18</b>	<b>.030</b>	<b>0.07-1.25</b>
Once or twice a year	0.17 ± 0.15	1.13	0.26	-0.13-0.48	<b>0.65 ± 0.31</b>	<b>2.10</b>	<b>.036</b>	<b>0.04-1.25</b>
Every few months	<b>0.56 ± 0.17</b>	<b>3.31</b>	<b>.0001</b>	<b>0.23-0.89</b>	<b>0.76 ± 0.35</b>	<b>2.14</b>	<b>.032</b>	<b>0.06-1.45</b>
Monthly or more	0.25 ± 0.22	1.13	0.26	-0.18-0.67	0.14 ± 0.39	0.36	.72	-0.63-0.91

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=3,445. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing, depression, social network, civic engagement, whether participants had a hobby, whether participants used the internet and whether participants read a daily newspaper.

Table S2: Regression coefficients showing baseline associations between cultural engagement and cognition

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	<b>0.36 ± 0.13</b>	<b>2.77</b>	.006	<b>0.11-0.62</b>	0.43 ± 0.27	1.59	.11	-0.10-0.96
Once or twice a year	<b>0.40 ± 0.14</b>	<b>2.78</b>	.005	<b>0.12-0.69</b>	<b>0.77 ± 0.30</b>	<b>2.59</b>	.010	<b>0.19-1.36</b>
Every few months	<b>0.96 ± 0.17</b>	<b>5.60</b>	<.001	<b>0.62-1.29</b>	<b>1.48 ± 0.35</b>	<b>4.20</b>	<.001	<b>0.79-2.17</b>
Monthly or more	<b>0.81 ± 0.24</b>	<b>3.39</b>	.001	<b>0.34-1.28</b>	<b>1.81 ± 0.49</b>	<b>3.67</b>	<.001	<b>0.85-2.78</b>
Theatre/concert/opera								
Less than once a year	<b>0.46 ± 0.15</b>	<b>3.15</b>	.002	<b>0.17-0.75</b>	0.23 ± 0.30	0.75	.45	-0.36-0.81
Once or twice a year	<b>0.35 ± 0.15</b>	<b>2.38</b>	.017	<b>0.06-0.63</b>	-0.09 ± 0.30	-0.31	.76	-0.68-0.50
Every few months	<b>0.47 ± 0.16</b>	<b>2.91</b>	.004	<b>0.15-0.79</b>	0.13 ± 0.33	0.38	.71	-0.53-0.78
Monthly or more	<b>0.53 ± 0.21</b>	<b>2.46</b>	.014	<b>0.11-0.95</b>	0.31 ± 0.44	0.70	.49	-0.56-1.17
Cinema								
Less than once a year	0.25 ± 0.13	1.92	.055	-0.01-0.51	0.21 ± 0.27	0.75	.45	-0.33-0.74
Once or twice a year	0.14 ± 0.15	0.96	.34	-0.15-0.43	0.28 ± 0.30	0.92	.36	-0.31-0.87
Every few months	<b>0.55 ± 0.16</b>	<b>3.54</b>	<.001	<b>0.25-0.86</b>	<b>0.78 ± 0.32</b>	<b>2.42</b>	.015	<b>0.15-1.41</b>
Monthly or more	0.05 ± 0.20	0.28	.78	-0.33-0.44	0.42 ± 0.40	1.04	.30	-0.37-1.22

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=3,445. Model adjusted for sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing, depression, social network, civic engagement, whether participants had a hobby, whether participants used the internet and whether participants read a daily newspaper.

**Table S3-A:** Regression coefficients showing the effect of cultural engagement on cognition: lower cognitive function

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	0.21 ± 0.18	1.12	.26	-0.15-0.57	0.16 ± 0.35	0.45	.65	0.53-0.85
Once or twice a year	<b>0.45 ± 0.21</b>	<b>2.19</b>	<b>.029</b>	<b>0.05-0.86</b>	<b>0.82 ± 0.39</b>	<b>2.08</b>	<b>.037</b>	0.05-1.59
Every few months	<b>0.68 ± 0.27</b>	<b>2.54</b>	<b>.011</b>	<b>0.15-1.20</b>	<b>1.16 ± 0.50</b>	<b>2.33</b>	<b>.020</b>	0.18-2.14
Monthly or more	0.64 ± 0.37	1.75	.080	-0.08-1.37	0.71 ± 0.77	0.92	.36	-0.80-2.21
Theatre/concert/opera								
Less than once a year	<b>0.65 ± 0.20</b>	<b>3.18</b>	<b>.001</b>	<b>0.25-1.05</b>	0.55 ± 0.40	1.39	.17	-0.23-1.32
Once or twice a year	0.15 ± 0.20	0.74	.46	-0.25-0.55	<b>0.87 ± 0.40</b>	<b>2.21</b>	<b>.027</b>	<b>0.10-1.65</b>
Every few months	<b>0.88 ± 0.24</b>	<b>3.68</b>	<b>&lt;.001</b>	<b>0.41-1.34</b>	0.82 ± 0.45	1.80	.072	-0.07-1.71
Monthly or more	<b>0.84 ± 0.32</b>	<b>2.64</b>	<b>.008</b>	<b>0.21-1.46</b>	1.14 ± 0.63	1.79	.073	-0.11-2.38
Cinema								
Less than once a year	0.06 ± 0.19	0.31	.76	-0.31-0.43	0.46 ± 0.36	1.30	.19	-0.24-1.16
Once or twice a year	0.14 ± 0.21	0.65	.51	-0.28-0.55	0.66 ± 0.41	1.63	.10	-0.13-1.46
Every few months	<b>0.53 ± 0.24</b>	<b>2.21</b>	<b>.028</b>	<b>0.06-1.00</b>	0.35 ± 0.45	0.77	.44	-0.54-1.23
Monthly or more	0.38 ± 0.29	1.30	.19	-0.19-0.94	-0.20-0.58	-0.33	.74	-1.34-0.95

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. Memory: n=1,854. Semantic fluency: n=1,752. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing, depression, social network, civic engagement, whether participants had a hobby, whether participants used the internet and whether participants read a daily newspaper.

**Table S3-B:** Regression coefficients showing the effect of cultural engagement on cognition: higher cognitive function

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	0.30 ± 0.22	1.39	.16	-0.12-0.73	0.59 ± 0.45	1.29	0.20	-0.30-1.48
Once or twice a year	<b>0.70 ± 0.23</b>	<b>3.00</b>	<b>.003</b>	<b>0.24-1.16</b>	<b>1.42 ± 0.49</b>	<b>2.92</b>	<b>.004</b>	<b>0.47-2.38</b>
Every few months	<b>0.74 ± 0.26</b>	<b>2.88</b>	<b>.004</b>	<b>0.24-1.25</b>	<b>2.13 ± 0.54</b>	<b>3.92</b>	<b>&lt;.001</b>	<b>1.07-3.20</b>
Monthly or more	<b>0.98 ± 0.36</b>	<b>2.73</b>	<b>.006</b>	<b>0.28-1.68</b>	1.36 ± 0.72	1.89	.059	-0.49-2.76
Theatre/concert/opera								
Less than once a year	0.23 ± 0.24	0.96	.34	-0.24-0.70	0.51 ± 0.49	1.05	.30	-0.45-1.47
Once or twice a year	0.39 ± 0.24	1.64	.10	-0.08-0.87	0.52 ± 0.49	1.06	.29	-0.44-1.49
Every few months	0.45 ± 0.26	1.77	.077	0.05-0.95	<b>1.43 ± 0.53</b>	<b>2.70</b>	<b>.007</b>	<b>0.39-2.46</b>
Monthly or more	<b>0.82 ± 0.33</b>	<b>2.46</b>	<b>.014</b>	<b>0.17-1.47</b>	<b>1.34 ± 0.66</b>	<b>2.01</b>	<b>.044</b>	<b>0.03-2.64</b>
Cinema								
Less than once a year	0.25 ± 0.22	1.14	.25	-0.18-0.67	0.82 ± 0.44	1.85	.065	-0.05-1.69
Once or twice a year	0.19 ± 0.23	0.83	.41	-0.26-0.65	0.63 ± 0.48	1.32	.19	-0.31-1.57
Every few months	<b>0.64 ± 0.24</b>	<b>2.73</b>	<b>.006</b>	<b>0.18-1.10</b>	<b>1.06 ± 0.50</b>	<b>2.13</b>	<b>.034</b>	<b>0.08-2.03</b>
Monthly or more	0.21-0.31	0.69	.49	-0.39-0.81	0.50 ± 0.61	0.82	.41	-0.69-1.69

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. Memory: n=1,591. Semantic fluency: n=1,693. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing, depression, social network, civic engagement, whether participants had a hobby, whether participants used the internet and whether participants read a daily newspaper.

**Table S4-A:** Regression coefficients showing the effect of cultural engagement on cognition: excluding those with mobility issues

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	0.29 ± 0.15	1.90	.058	-0.01-0.59	0.23 ± 0.31	0.74	0.46	-0.38-0.83
Once or twice a year	0.62 ± 0.17	3.71	<.001	0.29-0.94	1.04 ± 0.34	3.09	.002	0.38-1.69
Every few months	0.73 ± 0.20	3.73	<.001	0.35-1.11	1.72 ± 0.39	4.36	<.001	0.94-2.49
Monthly or more	0.88 ± 0.27	3.27	.001	0.35-1.41	1.14 ± 0.55	2.09	.037	0.07-2.21
Theatre/concert/opera								
Less than once a year	0.47 ± 0.17	2.75	.006	0.13-0.80	0.78 ± 0.34	2.28	.023	0.11-1.46
Once or twice a year	0.37 ± 0.17	2.18	.029	0.04-0.70	0.82 ± 0.34	2.40	.016	0.15-1.49
Every few months	0.82 ± 0.19	4.42	<.001	0.46-1.18	1.37 ± 0.38	3.66	<.001	0.64-2.11
Monthly or more	0.91 ± 0.24	3.83	<.001	0.45-1.38	1.44 ± 0.48	3.00	.003	0.50-2.39
Cinema								
Less than once a year	0.14 ± 0.15	0.92	.36	-0.16-0.44	0.66 ± 0.31	2.14	.033	0.06-1.27
Once or twice a year	0.32 ± 0.17	1.93	.054	0.01-0.65	0.83 ± 0.34	2.46	.014	0.17-1.49
Every few months	0.64 ± 0.18	3.63	<.001	0.30-0.99	0.92 ± 0.36	2.57	.010	0.22-1.62
Monthly or more	0.33 ± 0.22	1.53	.13	-0.09-0.76	0.30 ± 0.44	0.69	.49	-0.56-1.17

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=2,908. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing, depression, social network, civic engagement, whether participants had a hobby, whether participants used the internet and whether participants read a daily newspaper.

**Table S5-A:** Regression coefficients showing the effect of cultural engagement on cognition: excluding those with dementia diagnosis at baseline or in the 2 years following baseline

	Memory				Semantic fluency			
	$\beta \pm SE$	t	p	CI	$\beta \pm SE$	t	p	CI
Gallery/museum								
Less than once a year	0.29 ± 0.14	2.01	.045	0.01-0.57	0.29 ± 0.28	1.01	.31	-0.27-0.85
Once or twice a year	0.62 ± 0.16	3.92	<.001	0.31-0.92	1.11 ± 0.31	3.55	<.001	0.50-1.73
Every few months	0.73 ± 0.19	3.95	<.001	0.37-1.10	1.70 ± 0.37	4.60	<.001	0.98-2.43
Monthly or more	0.88 ± 0.26	3.42	.001	0.38-1.39	1.07 ± 0.51	2.07	.038	0.06-2.08
Theatre/concert/opera								
Less than once a year	0.46 ± 0.16	2.90	.004	0.15-0.76	0.52 ± 0.31	1.64	.10	-0.10-1.13
Once or twice a year	0.28 ± 0.16	1.77	.077	-0.03-0.59	0.75 ± 0.31	2.39	.017	0.13-1.37
Every few months	0.66 ± 0.18	3.77	<.001	0.32-1.00	1.16 ± 0.35	3.31	.001	0.47-1.84
Monthly or more	0.85 ± 0.23	3.70	<.001	0.40-1.30	1.32 ± 0.46	2.87	.004	0.42-2.22
Cinema								
Less than once a year	0.14 ± 0.14	1.00	.32	-0.14-0.42	0.62 ± 0.29	2.19	.029	0.06-1.18
Once or twice a year	0.15 ± 0.16	0.97	.33	-0.16-0.46	0.62 ± 0.31	1.96	.050	0.0002-1.23
Every few months	0.55 ± 0.17	3.28	.001	0.22-0.88	0.69 ± 0.34	2.04	.041	0.03-1.35
Monthly or more	0.32 ± 0.21	1.50	.13	-0.10-0.73	0.13 ± 0.42	0.30	.76	-0.70-0.96

REF: never. B=beta coefficient; SE=standard error; CI=confidence intervals. N=3,314. Model adjusted for baseline cognition, sex, age, marital status, ethnicity, educational attainment, employment status, occupational classification, wealth, self-reported health, eyesight, hearing, depression, social network, civic engagement, whether participants had a hobby, whether participants used the internet and whether participants read a daily newspaper.