Supplementary Material

In the main manuscript, we reported repeated-measures analyses of variance (ANOVAs) to examine differences in dwell-time between areas of interest (AOIs: corresponding vs. non-corresponding), tasks (mental image generation, inspection, vividness, and old/new recognition), and stimulus types (old vs. new). Dwell-time in milliseconds was used as the dependent variable, as this metric provides a more straightforward interpretation of main effects of task and group comparisons (older vs. younger adults). However, dwell-time expressed as a percentage (calculated as the proportion of time spent on an AOI relative to the total trial time) is also a common metric in the literature, particularly when comparisons to chance level (e.g., 25%) are of interest.

For completeness and transparency, we report here all analyses using percentage dwell-time as the dependent variable. Additionally, we include visualizations of the significant effects. Importantly, the choice of metric (raw milliseconds vs. percentage) did not affect the overall pattern of results regarding our main hypotheses (the LAN effect and the generalization effect). These analyses and figures are reported in Tables 1–4 and Figures 1–4.

Furthermore, we conducted exploratory correlation analyses between the magnitude of the LAN effect (i.e., mean dwell-time percentage in the corresponding AOI) during each task and both pictorial recall performance and vividness ratings. These are reported in Table 5 (for older adults) and Table 6 (for younger adults). These analyses revealed non-significant correlations between the LAN effect and both objective memory performance and subjective vividness in both age groups. Given the relatively small sample sizes, these findings should be interpreted with caution.

Supplementary Table 1

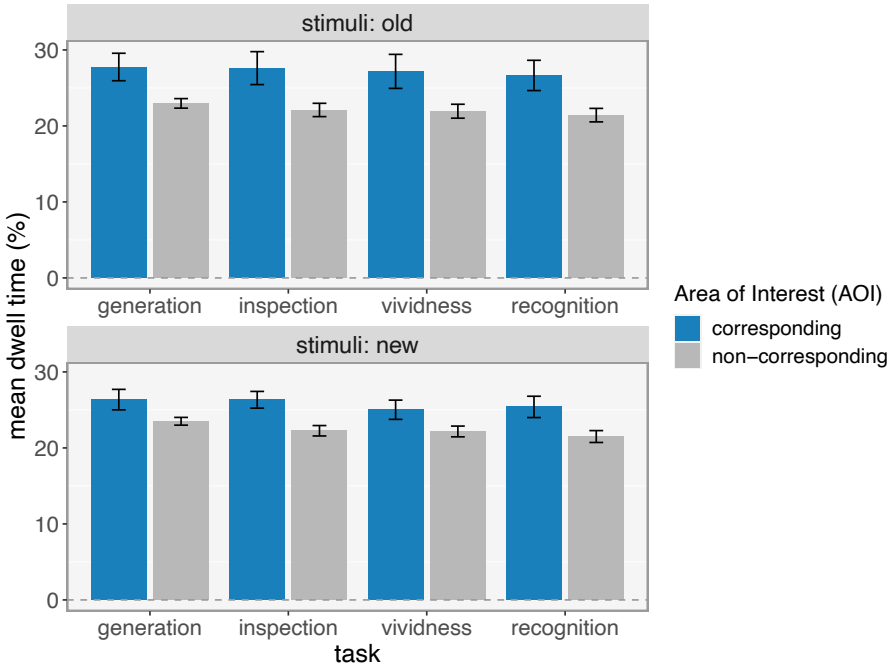
ANOVA table showing the effects of stimuli, task, and AOI on dwell-time percentage in older adults.

Predictor	*Num DF*	*Den DF*	*F-value*	*p-value*	η^2_p
Pictorial recall					
Stimuli	1.00	36.00	1.37	.250	.04
Task	**1.45**	**52.24**	**4.16**	**.032**	**.10**
AOI	**1.00**	**36.00**	**5.20**	**.029**	**.13**
Stimuli:Task	2.05	73.89	0.43	.661	.01
Stimuli:AOI	1.00	36.00	0.933	.341	.03
Task:AOI	2.01	72.26	0.398	.674	.01
Stimuli:Task:AOI	2.13	76.65	0.163	.862	<.01

Note. AOI = area of interest

Supplementary Figure 1

Mean dwell-time percentage as a function of AOI, task, and stimulus type in older adults.



Supplementary Table 2

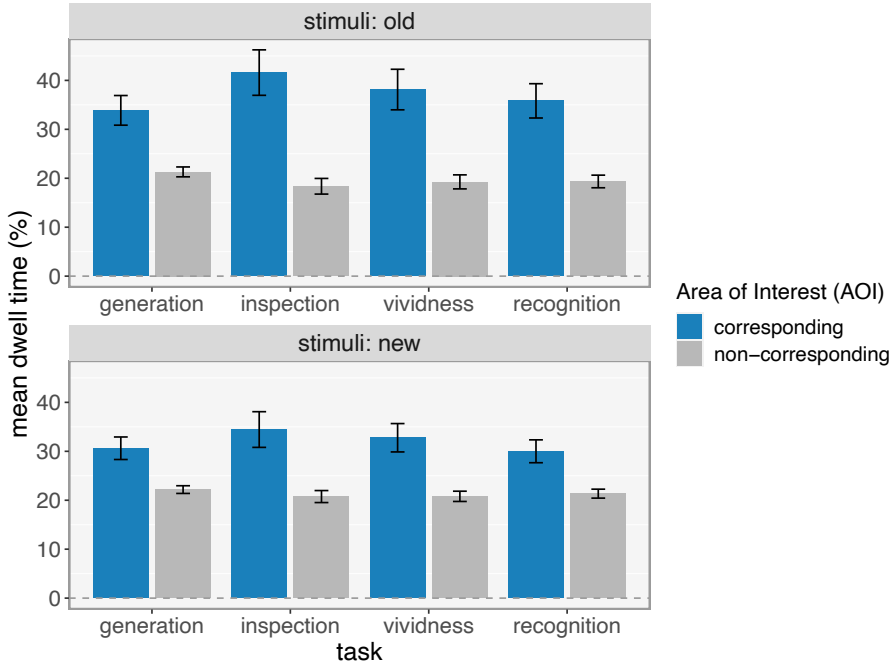
ANOVA table showing the effects of stimuli, task, and AOI on dwell-time percentage in younger adults.

Predictor	*Num DF*	*Den DF*	*F-value*	*p-value*	η^2_p
Pictorial recall					
Stimuli	**1.00**	**37.00**	**5.07**	**.030**	**.12**
Task	**2.02**	**74.74**	**6.40**	**.003**	**.15**
AOI	**1.00**	**37.00**	**12.81**	**.001**	**.26**
Stimuli:Task	2.40	88.79	1.26	.292	.03
Stimuli:AOI	**1.00**	**37.00**	**4.38**	**.043**	**.11**
Task:AOI	**1.97**	**72.89**	**6.77**	**.002**	**.16**
Stimuli:Task:AOI	2.32	85.75	1.88	.153	.05

Note. AOI = area of interest

Supplementary Figure 2

Mean dwell-time percentage as a function of AOI, task, and stimulus type in younger adults.



Supplementary Table 3

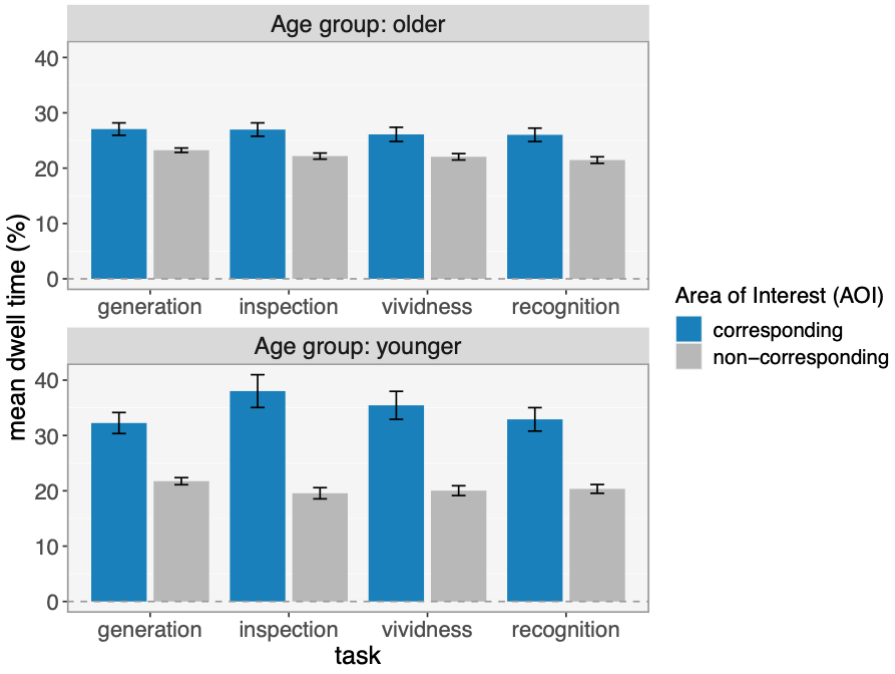
ANOVA table showing the effects of age-group, stimuli, task, and AOI on dwell-time percentage.

Predictor	*Num DF*	*Den DF*	*F-value*	*p-value*	η^2_p
Pictorial recall					
Age-group	**1.00**	**73.00**	**7.06**	**.010**	**.09**
Stimuli	**1.00**	**73.00**	**6.30**	**.014**	**.08**
Task	**2.22**	**162.39**	**6.49**	**.001**	**.08**
AOI	**1.00**	**73.00**	**17.43**	**< .001**	**.19**
Age-group:Stimuli	1.00	73.00	1.50	.224	.02
Age-group:Task	**2.22**	**162.39**	**4.50**	**.010**	**.06**
Age-group:AOI	**1.00**	**73.00**	**5.00**	**.028**	**.06**
Stimuli:Task	2.33	170.24	1.16	.320	.02
Stimuli:AOI	**1.00**	**73.00**	**5.21**	**.025**	**.07**
Task:AOI	**2.23**	**162.84**	**6.18**	**.002**	**.08**
Age-group:Stimuli:Task	2.33	170.24	0.69	.523	.01
Age-group:Stimuli:AOI	1.00	73.00	1.88	.174	.03
Age-group:Task:AOI	**2.23**	**162.84**	**4.37**	**.011**	**.06**
Stimuli:Task:AOI	2.34	170.60	0.99	.386	.01
Age-group:Stimuli:Task:AOI	2.34	170.60	1.54	.213	.02

Note. AOI = area of interest

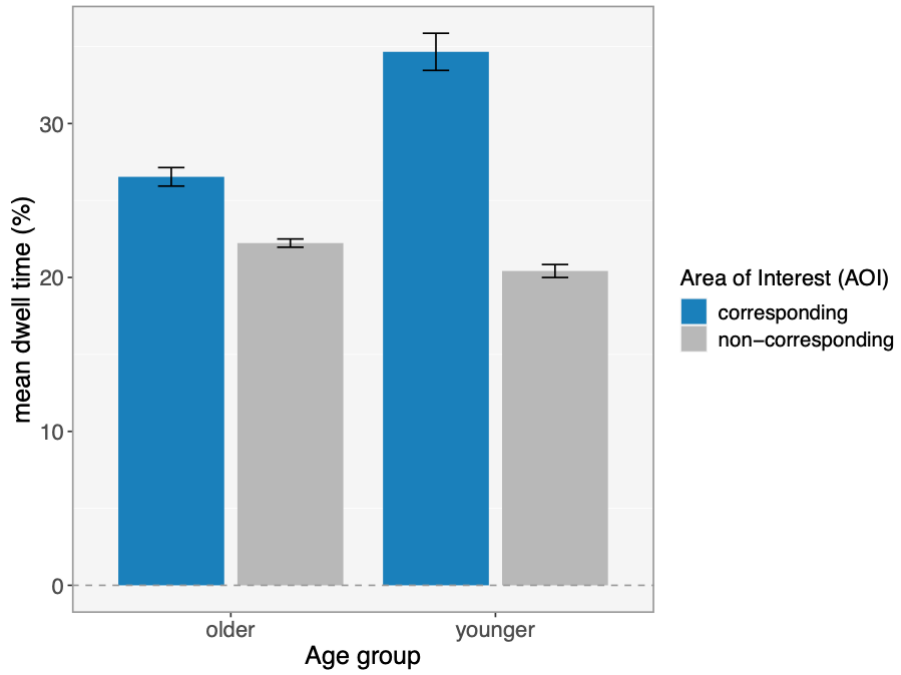
Supplementary Figure 3

Mean dwell-time percentage as a function of AOI, task, and age group.



Supplementary Figure 4

Mean dwell-time percentage as a function of AOI and age group.



Supplementary Table 4

ANOVA table showing the effects of age-group, task, and AOI on dwell-time percentage in error trials.

Predictor	*Num DF*	*Den DF*	*F-value*	*p-value*	η^2_p
Pictorial recall					
Age-group	1.00	62.00	1.02	.317	.02
Task	2.46	152.39	1.23	.300	.02
AOI	1.00	62.00	2.34	.131	.04
Age-group:Task	2.46	152.39	0.55	.612	<.01
Age-group:AOI	1.00	62.00	1.23	.271	.02
Task:AOI	2.41	149.63	0.05	.972	<.01
Age-group:Task:AOI	2.41	149.63	0.57	.599	<.01

Note. AOI = area of interest

Supplementary Table 5

Means, standard deviations, and correlations with confidence intervals in older adults.

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. LAN Enc	68.55	10.22							
2. LAN Gen	27.87	8.35	-.02						
			[-.34, .30]						
3. LAN Insp	27.68	9.51	.11	.84**					
			[-.22, .42]	[.71, .91]					
4. LAN Vivid	27.24	9.32	.02	.68**	.87**				
			[-.31, .34]	[.46, .82]	[.76, .93]				
5. LAN Rec	26.62	9.07	.00	.69**	.83**	.90**			
			[-.32, .33]	[.47, .83]	[.69, .91]	[.82, .95]			
6. Acc Insp	68.24	8.45	.06	.03	.15	.08	.05		
			[-.27, .37]	[-.30, .35]	[-.18, .45]	[-.25, .40]	[-.28, .37]		
7. Acc Rec	87.25	6.03	-.20	.25	.26	.13	.09	.36*	
			[-.49, .13]	[-.08, .53]	[-.07, .54]	[-.21, .43]	[-.24, .40]	[.05, .62]	
8. Vividness	3.36	0.59	.34*	-.22	-.06	-.22	-.21	.26	.06
			[.01, .59]	[-.51, .11]	[-.38, .27]	[-.51, .11]	[-.50, .12]	[-.07, .54]	[-.27, .37]

Note. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$. LAN (looking at nothing effect) is measured as dwell-time (in %) within the corresponding area. LAN Enc = Looking at nothing during encoding. LAN Gen = Looking at nothing during mental image generation. LAN Insp = Looking at nothing during mental image inspection. LAN Vivid = Looking at nothing during mental image vividness. LAN Rec = Looking at nothing during old/new recognition. Acc Rec = percentage of correct answers during the old/new recognition tasks. Acc Insp = percentage of correct answers during the mental image inspection task. Vividness = vividness rating.

Supplementary Table 6

Means, standard deviations, and correlations with confidence intervals in younger adults.

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. LAN Enc	69.33	6.47							
2. LAN Gen	33.72	16.82	.25						
			[-.08, .53]						
3. LAN Insp	41.56	26.47	.24	.92**					
			[-.08, .52]	[.86, .96]					
4. LAN Vivid	36.94	23.05	.28	.92**	.96**				
			[-.04, .55]	[.85, .96]	[.93, .98]				
5. LAN Rec	35.10	18.99	.32*	.87**	.90**	.95**			
			[.00, .58]	[.76, .93]	[.81, .95]	[.91, .98]			
6. Acc Insp	70.15	8.92	-.04	.29	.19	.30	.38*		
			[-.36, .28]	[-.03, .56]	[-.14, .48]	[-.03, .56]	[.06, .62]		
7. Acc Rec	90.20	6.74	.04	-.12	-.13	-.09	-.02	.45**	
			[-.28, .35]	[-.42, .21]	[-.44, .19]	[-.40, .23]	[-.33, .30]	[.15, .67]	
8. Vividness	2.94	0.69	-.13	-.04	-.06	-.07	-.02	.30	.07
			[-.43, .20]	[-.35, .29]	[-.38, .26]	[-.38, .26]	[-.34, .30]	[-.03, .56]	[-.25, .38]

Note. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$. LAN (looking at nothing effect) is measured as dwell-time (in %) within the corresponding area. LAN Enc = Looking at nothing during encoding. LAN Gen = Looking at nothing during mental image generation. LAN Insp = Looking at nothing during mental image inspection. LAN Vivid = Looking at nothing during mental image vividness. LAN Rec = Looking at nothing during old/new recognition. Acc Rec = percentage of correct answers during the old/new recognition tasks. Acc Insp = percentage of correct answers during the mental image inspection task. Vividness = vividness rating.