

Figure 2-1: Model estimates of the full model for the effect of image category and covariates (Table 1, Eq. 1) on d' and LDI. Values indicate the positive (blue) or negative (red) mean estimate of the posterior distribution and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. **The effect of image category (F>NF) and Gender (M<F) on memory performance measures seemed to be evident as their 95% CI did not include Zero.**

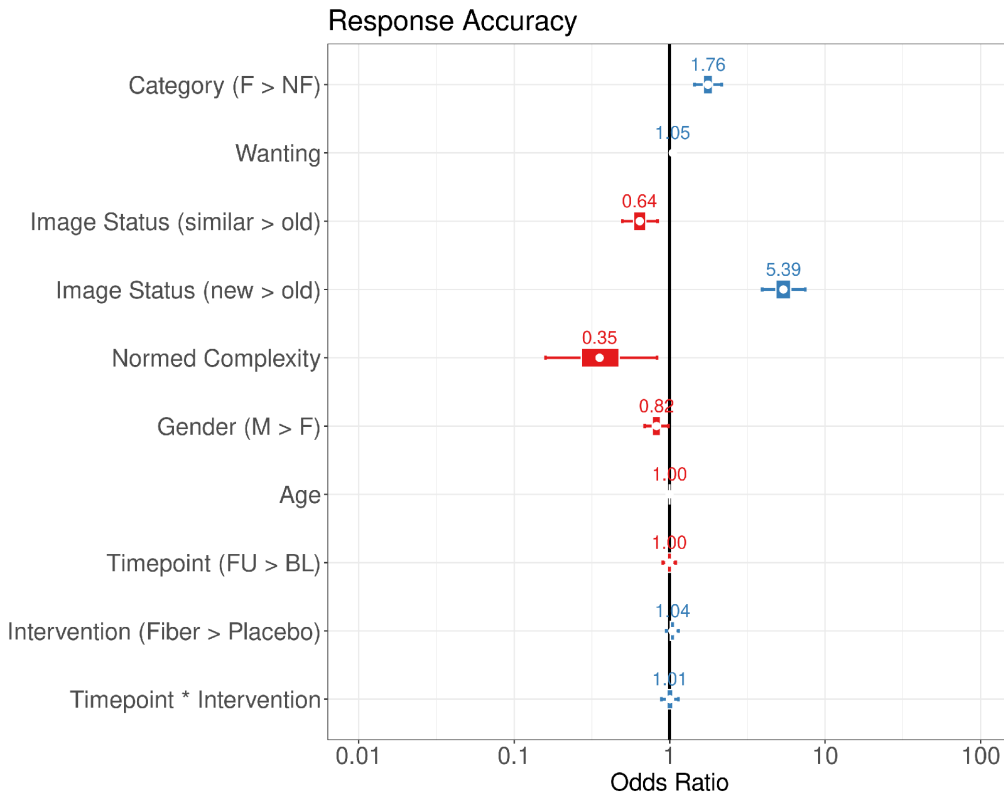


Figure 2-2: Odds ratios of the full model for the effect of image category and covariates on response accuracy (Table 1, Eq. 3). Values indicate the positive (blue) or negative (red) median odds ratio (exponentiated regression coefficients) and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. **The effect of image category (F>NF), image status (similar<old, new>old), normed complexity and Gender (M<F) on response accuracy were evident as their 95% CI did not include Zero.**

Table 2-1: Full and null Bayesian linear regression models (BLRMs) for the effect of image category on d' .

	full model	null model
<i>Predictors for d'</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.23 (0.73 – 1.73)	1.26 (0.72 – 1.78)
Category (F > NF)	0.67 (0.16 – 1.17)	
Age	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)
Gender (M > F)	-0.26 (-0.48 – -0.04)	-0.26 (-0.48 – -0.04)
Timepoint (FU > BL)	0.07 (-0.05 – 0.18)	0.07 (-0.05 – 0.19)
Intervention (Fiber > Placebo)	0.04 (-0.08 – 0.15)	0.04 (-0.08 – 0.14)
Timepoint * Intervention	-0.03 (-0.19 – 0.13)	-0.03 (-0.19 – 0.13)
Random Effects		
σ^2	0.39	0.39
T_{00}	0.02 Set	0.04 Set
	0.05 Subject	0.04 Subject
T_{11}	0.28 Set.CategoryF	1.25 Set.CategoryF
	0.03 Subject.CategoryF	0.03 Subject.CategoryF
	0.00 Subject.hunger_mean_total	0.00 Subject.hunger_mean_total
	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral
	0.04 Subject.Wanting_catwanted	0.04 Subject.Wanting_catwanted
	0.73 Subject.nQA_UF_mean	0.79 Subject.nQA_UF_mean
	0.27 Subject.CategoryF:nQA_UF_mean	0.29 Subject.CategoryF:nQA_UF_mean
	0.01 Subject.hunger_mean_total:nQA_UF_mean	0.01 Subject.hunger_mean_total:nQA_UF_mean
	0.34 Subject.Wanting_catneutral:nQA_UF_mean	0.32 Subject.Wanting_catneutral:nQA_UF_mean
	0.68 Subject.Wanting_catwanted:nQA_UF_mean	0.70 Subject.Wanting_catwanted:nQA_UF_mean
P_{01}		
P_{01}		
ICC	0.36	0.18
N	55 Subject	55 Subject
	4 Set	4 Set
Observations	1022	1022
Marginal R^2 / Conditional R^2	0.204 / 0.426	0.032 / 0.425

Table 2-2: Full and null BLRMs for the effect of image category on LDI.

<i>Predictors for LDI</i>	full model	null model
	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.08 (0.53 – 1.57)	1.12 (0.57 – 1.66)
Category (F > NF)	0.73 (0.15 – 1.25)	
Age	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)
Gender (M > F)	-0.29 (-0.51 – -0.06)	-0.29 (-0.51 – -0.07)
Timepoint (FU > BL)	0.07 (-0.06 – 0.19)	0.07 (-0.05 – 0.19)
Intervention (Fiber > Placebo)	0.05 (-0.07 – 0.17)	0.05 (-0.07 – 0.17)
Timepoint * Intervention	-0.01 (-0.17 – 0.17)	-0.00 (-0.18 – 0.17)
Random Effects		
σ^2	0.46	0.46
T_{00}	0.02 Set	0.04 Set
	0.05 Subject	0.06 Subject
T_{11}	0.31 Set.CategoryF	1.45 Set.CategoryF
	0.03 Subject.CategoryF	0.03 Subject.CategoryF
	0.00 Subject.hunger_mean_total	0.00 Subject.hunger_mean_total
	0.02 Subject.Wanting_catneutral	0.02 Subject.Wanting_catneutral
	0.04 Subject.Wanting_catwanted	0.04 Subject.Wanting_catwanted
	0.79 Subject.nQA_UF_mean	0.79 Subject.nQA_UF_mean
	0.33 Subject.CategoryF:nQA_UF_mean	0.32 Subject.CategoryF:nQA_UF_mean
	0.01 Subject.hunger_mean_total:nQA_UF_mean	0.01 Subject.hunger_mean_total:nQA_UF_mean
	0.25 Subject.Wanting_catneutral:nQA_UF_mean	0.23 Subject.Wanting_catneutral:nQA_UF_mean
	0.66 Subject.Wanting_catwanted:nQA_UF_mean	0.66 Subject.Wanting_catwanted:nQA_UF_mean
P_{01}		
P_{01}		
ICC	0.34	0.18
N	55 Subject	55 Subject
	4 Set	4 Set
Observations	1011	1011
Marginal R ² / Conditional R ²	0.213 / 0.415	0.039 / 0.414

Table 2-3: Full and null BLRMs for the effect of image category on response accuracy.

<i>Predictors for response accuracy</i>	full model	null model
	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	3.87 (2.23 – 6.81)	8.17 (5.03 – 13.49)
Category (F > NF)	1.76 (1.45 – 2.16)	
Wanting	1.05 (1.02 – 1.07)	1.05 (1.03 – 1.08)
Image Status (similar > old)	0.64 (0.50 – 0.84)	0.64 (0.49 – 0.85)
Image Status (new > old)	5.39 (3.94 – 7.47)	5.11 (3.70 – 7.25)
Normed Complexity	0.35 (0.16 – 0.83)	0.08 (0.04 – 0.15)
Gender (M > F)	0.82 (0.69 – 0.98)	0.82 (0.68 – 0.98)
Age	1.00 (0.98 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	1.00 (0.90 – 1.09)	1.00 (0.91 – 1.09)
Intervention (Fiber > Placebo)	1.04 (0.95 – 1.14)	1.04 (0.96 – 1.14)
Timepoint * Intervention	1.01 (0.89 – 1.14)	1.00 (0.88 – 1.14)
Random Effects		
σ^2	3.29	3.29
T_{00}	0.55 Image	0.58 Image
	0.13 Subject	0.13 Subject
T_{11}	0.07 Subject.CategoryF	0.08 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.66 Subject.Statussimilar	0.66 Subject.Statussimilar
	0.89 Subject.Statusnew	0.89 Subject.Statusnew
ρ_{01}		
ICC	0.24	0.23
N	56 Subject	56 Subject
	640 Image	640 Image
Observations	28395	28395
Marginal R ² / Conditional R ²	0.080 / 0.198	0.072 / 0.197

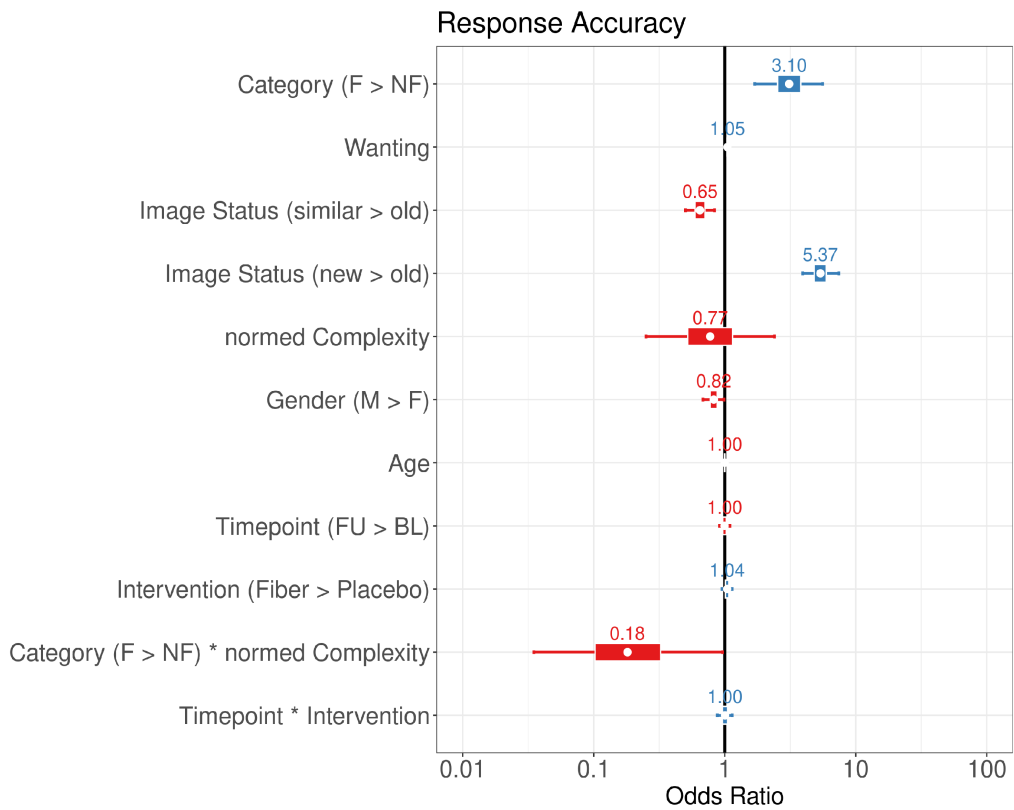


Figure 3-1: Odds ratios of the full model for the effect of normed complexity and covariates on response accuracy (Table 1, Eq. 5). Values indicate the positive (blue) or negative (red) median odds ratio (exponentiated regression coefficients) and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. **The effect of normed complexity on response accuracy was evidently different between image categories as the interaction's 95% CI did not include Zero.**

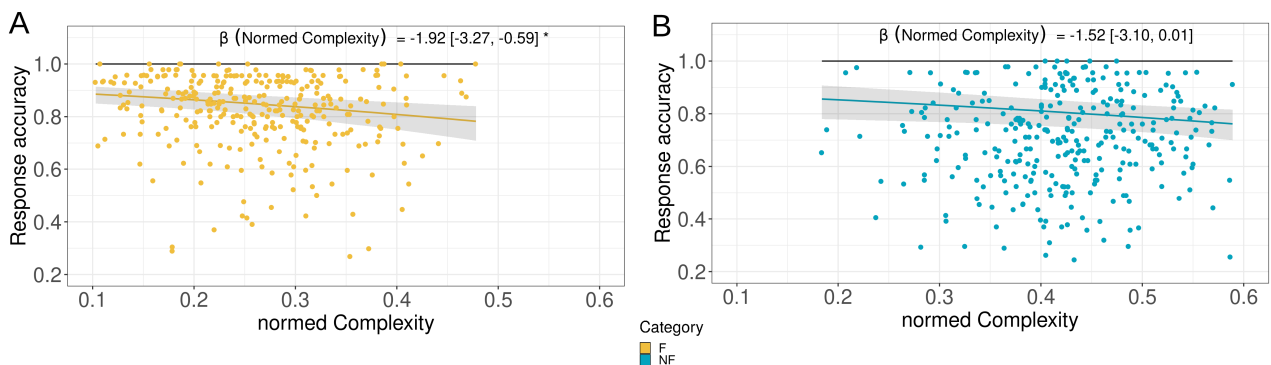


Figure 3-2: Predicted and actual response accuracy depending on normed complexity of each image category separately. Points show the averaged response accuracy of each image over its normed complexity and lines with 95%-CI depict predictions based on full models. Higher normed complexity seemed to evidently predict lower response accuracy of (A) food items but not of (B) non-food/art items.

Table 3-1: Full and null BLRMs for the effect of normed image complexity on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	2.76 (1.44 – 5.21)	3.92 (2.25 – 6.86)	2.49 (1.61 – 3.81)
Category (F > NF)	3.10 (1.69 – 5.59)	1.76 (1.42 – 2.13)	2.07 (1.78 – 2.43)
Wanting	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.07)
Image Status (similar > old)	0.65 (0.50 – 0.84)	0.64 (0.49 – 0.83)	0.64 (0.50 – 0.83)
Image Status (new > old)	5.37 (3.93 – 7.44)	5.38 (3.93 – 7.40)	5.33 (3.90 – 7.31)
normed Complexity	0.77 (0.25 – 2.39)	0.35 (0.15 – 0.78)	
Gender (M > F)	0.82 (0.68 – 0.99)	0.82 (0.68 – 0.98)	0.82 (0.68 – 0.98)
Age	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	1.00 (0.91 – 1.10)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)
Intervention (Fiber > Placebo)	1.04 (0.95 – 1.14)	1.04 (0.96 – 1.14)	1.04 (0.96 – 1.14)
Category (F > NF) * normed Complexity	0.18 (0.03 – 0.96)		
Timepoint * Intervention	1.00 (0.88 – 1.14)	1.00 (0.88 – 1.14)	1.00 (0.88 – 1.14)
Random Effects			
σ^2	3.29	3.29	3.29
T ₀₀	0.55 Image	0.55 Image	0.56 Image
	0.13 Subject	0.13 Subject	0.13 Subject
T ₁₁	0.07 Subject.CategoryF	0.07 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar
	0.88 Subject.Statusnew	0.89 Subject.Statusnew	0.88 Subject.Statusnew
	0.07 Subject.complexity_norm	0.08 Subject.complexity_norm	0.08 Subject.complexity_norm
P ₀₁			
P ₀₁			
ICC	0.24	0.24	0.24
N	56 Subject	56 Subject	56 Subject
	640 Image	640 Image	640 Image
Observations	28395	28395	28395
Marginal R ² / Conditional R ²	0.081 / 0.198	0.081 / 0.198	0.079 / 0.198

Table 3-2: Full and null BLRMs for the effect of normed image complexity on response accuracy of food images.

<i>Predictors for response accuracy</i>	full model	null model
	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	10.30 (5.30 – 19.79)	6.23 (3.37 – 10.98)
Wanting	1.03 (1.00 – 1.07)	1.03 (1.00 – 1.07)
Image Status (similar > old)	0.78 (0.53 – 1.16)	0.78 (0.54 – 1.13)
Image Status (new > old)	6.08 (4.00 – 9.56)	6.19 (4.03 – 9.78)
Calorie Quartile (cal2 > cal1)	1.08 (0.79 – 1.48)	1.03 (0.75 – 1.43)
Calorie Quartile (cal3 > cal1)	1.28 (0.95 – 1.77)	1.24 (0.92 – 1.70)
Calorie Quartile (cal4 > cal1)	1.38 (1.01 – 1.89)	1.36 (0.99 – 1.88)
Normed Complexity	0.13 (0.03 – 0.49)	
Gender (M > F)	0.68 (0.53 – 0.87)	0.68 (0.53 – 0.87)
Age	0.99 (0.98 – 1.01)	0.99 (0.98 – 1.01)
Timepoint (FU > BL)	1.02 (0.88 – 1.17)	1.02 (0.88 – 1.17)
Intervention (Fiber > Placebo)	1.11 (0.96 – 1.26)	1.11 (0.96 – 1.26)
Timepoint * Intervention	0.95 (0.78 – 1.16)	0.95 (0.78 – 1.16)
Random Effects		
σ^2	3.29	3.29
T_{00}	0.70 Image	0.72 Image
	0.28 Subject	0.28 Subject
T_{11}	0.00 Subject.Wanting	0.00 Subject.Wanting
	1.21 Subject.Statussimilar	1.21 Subject.Statussimilar
	1.11 Subject.Statusnew	1.12 Subject.Statusnew
	0.11 Subject.Typecal2	0.11 Subject.Typecal2
	0.09 Subject.Typecal3	0.09 Subject.Typecal3
	0.03 Subject.Typecal4	0.03 Subject.Typecal4
ρ_{01}		
ICC	0.30	0.31
N	56 Subject	56 Subject
	320 Image	320 Image
Observations	14213	14213
Marginal R ² / Conditional R ²	0.043 / 0.205	0.038 / 0.205

Table 3-3: Full and null BLRMs for the effect of normed image complexity on response accuracy of art (non-food) images.

	full model	null model
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	6.75 (2.66 – 17.46)	3.17 (1.84 – 5.55)
Wanting	1.07 (1.04 – 1.11)	1.07 (1.04 – 1.11)
Image Status (similar > old)	0.56 (0.43 – 0.73)	0.57 (0.43 – 0.75)
Image Status (new > old)	5.19 (3.74 – 7.39)	5.16 (3.61 – 7.42)
Type (plants > animals)	0.81 (0.59 – 1.12)	0.79 (0.57 – 1.07)
Type (objects > animals)	0.95 (0.74 – 1.22)	0.94 (0.73 – 1.21)
Style (DalÅ > Azulejos)	0.57 (0.37 – 0.90)	0.74 (0.51 – 1.06)
Style (Hundertwasser > Azulejos)	0.58 (0.39 – 0.87)	0.69 (0.48 – 0.97)
Style (Klimt > Azulejos)	0.87 (0.61 – 1.23)	0.87 (0.61 – 1.25)
Style (Munch > Azulejos)	0.71 (0.45 – 1.09)	0.90 (0.63 – 1.30)
Style (Picasso > Azulejos)	0.74 (0.51 – 1.08)	0.88 (0.63 – 1.24)
Style (Pointilism > Azulejos)	0.76 (0.54 – 1.10)	0.83 (0.58 – 1.18)
Style (popart > Azulejos)	0.73 (0.50 – 1.05)	0.80 (0.56 – 1.13)
Normed Complexity	0.22 (0.05 – 1.01)	
Gender (M > F)	0.87 (0.72 – 1.05)	0.87 (0.72 – 1.05)
Age	1.00 (0.98 – 1.01)	1.00 (0.98 – 1.01)
Timepoint (FU > BL)	0.98 (0.87 – 1.11)	0.98 (0.87 – 1.11)
Intervention (Fiber > Placebo)	1.01 (0.90 – 1.13)	1.01 (0.90 – 1.13)
Timepoint * Intervention	1.03 (0.87 – 1.22)	1.03 (0.87 – 1.22)
Random Effects		
σ^2	3.29	3.29
T_{00}	0.45 Image	0.45 Image
	0.06 Subject	0.06 Subject
T_{11}	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.52 Subject.Statussimilar	0.53 Subject.Statussimilar
	0.85 Subject.Statusnew	0.84 Subject.Statusnew
	0.02 Subject.Typeplants	0.02 Subject.Typeplants
	0.02 Subject.Typeobjects	0.02 Subject.Typeobjects
	0.02 Subject.Styledali	0.02 Subject.Styledali
	0.02 Subject.Stylehundertwasser	0.02 Subject.Stylehundertwasser
	0.02 Subject.Styleklimt	0.02 Subject.Styleklimt
	0.01 Subject.Stylemunch	0.01 Subject.Stylemunch
	0.01 Subject.Stylepicasso	0.01 Subject.Stylepicasso
	0.02 Subject.Stylepointilism	0.02 Subject.Stylepointilism
	0.08 Subject.Stylepopart	0.08 Subject.Stylepopart
ρ_{01}		
ρ_{01}		
ICC	0.21	0.21
N	56 Subject	56 Subject
	320 Image	320 Image
Observations	14182	14182
Marginal R ² / Conditional R ²	0.090 / 0.186	0.089 / 0.186

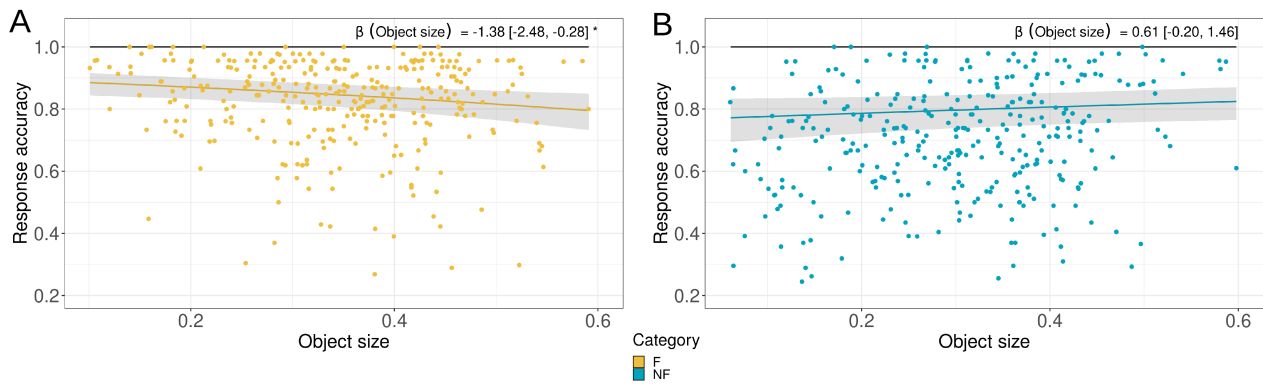


Figure 3-3: Predicted and actual response accuracy depending on object size of each image category separately. Points show the averaged response accuracy of each image over its object size and lines with 95%-CI depict predictions based on full models. **Higher object size seemed to evidently predict lower response accuracy of (A) food images but not higher response accuracy of (B) non-food/art images.**

Table 3-4: Full and null BLRMs for the effect of object size on response accuracy of food images.

<i>Predictors for response accuracy</i>	full model	null model
	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	17.57 (7.69 – 40.24)	10.30 (5.30 – 19.79)
Wanting	1.03 (1.00 – 1.07)	1.03 (1.00 – 1.07)
Image Status (similar > old)	0.80 (0.54 – 1.14)	0.78 (0.53 – 1.16)
Image Status (new > old)	5.86 (3.86 – 9.06)	6.08 (4.00 – 9.56)
Calorie Quartile (cal2 > cal1)	1.14 (0.84 – 1.56)	1.08 (0.79 – 1.48)
Calorie Quartile (cal3 > cal1)	1.35 (1.00 – 1.86)	1.28 (0.95 – 1.77)
Calorie Quartile (cal4 > cal1)	1.42 (1.03 – 1.94)	1.38 (1.01 – 1.89)
Object size	0.25 (0.08 – 0.76)	
Normed Complexity	0.09 (0.02 – 0.37)	0.13 (0.03 – 0.49)
Gender (M > F)	0.68 (0.53 – 0.87)	0.68 (0.53 – 0.87)
Age	0.99 (0.98 – 1.01)	0.99 (0.98 – 1.01)
Timepoint (FU > BL)	1.02 (0.88 – 1.17)	1.02 (0.88 – 1.17)
Intervention (Fiber > Placebo)	1.11 (0.97 – 1.27)	1.11 (0.96 – 1.26)
Timepoint * Intervention	0.95 (0.78 – 1.16)	0.95 (0.78 – 1.16)
Random Effects		
σ^2	3.29	3.29
T_{00}	0.68 Image	0.70 Image
	0.29 Subject	0.28 Subject
T_{11}	0.00 Subject.Wanting	0.00 Subject.Wanting
	1.23 Subject.Statussimilar	1.21 Subject.Statussimilar
	1.13 Subject.Statusnew	1.11 Subject.Statusnew
	0.10 Subject.Typecal2	0.11 Subject.Typecal2
	0.09 Subject.Typecal3	0.09 Subject.Typecal3
	0.03 Subject.Typecal4	0.03 Subject.Typecal4
ρ_{01}		
ρ_{01}		
ICC	0.30	0.30
N	56 Subject	56 Subject
	320 Image	320 Image
Observations	14213	14213
Marginal R ² / Conditional R ²	0.044 / 0.205	0.043 / 0.205

Table 3-5: Full and null BLRMs for the effect of object size on response accuracy of art (non-food) images.

<i>Predictors for response accuracy</i>	full model	null model
	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	4.53 (1.40 – 13.63)	6.75 (2.66 – 17.46)
Wanting	1.07 (1.04 – 1.11)	1.07 (1.04 – 1.11)
Image Status (similar > old)	0.57 (0.43 – 0.74)	0.56 (0.43 – 0.73)
Image Status (new > old)	5.10 (3.64 – 7.36)	5.19 (3.74 – 7.39)
Type (plants > animals)	0.80 (0.58 – 1.09)	0.81 (0.59 – 1.12)
Type (objects > animals)	0.96 (0.74 – 1.23)	0.95 (0.74 – 1.22)
Style (Dalí > Azulejos)	0.64 (0.39 – 1.04)	0.57 (0.37 – 0.90)
Style (Hundertwasser > Azulejos)	0.61 (0.41 – 0.93)	0.58 (0.39 – 0.87)
Style (Klimt > Azulejos)	0.88 (0.61 – 1.24)	0.87 (0.61 – 1.23)
Style (Munch > Azulejos)	0.76 (0.48 – 1.21)	0.71 (0.45 – 1.09)
Style (Picasso > Azulejos)	0.81 (0.54 – 1.22)	0.74 (0.51 – 1.08)
Style (Pointilism > Azulejos)	0.77 (0.53 – 1.11)	0.76 (0.54 – 1.10)
Style (popart > Azulejos)	0.76 (0.52 – 1.11)	0.73 (0.50 – 1.05)
Object size	1.85 (0.82 – 4.29)	
Normed Complexity	0.33 (0.06 – 1.80)	0.22 (0.05 – 1.01)
Gender (M > F)	0.87 (0.72 – 1.05)	0.87 (0.72 – 1.05)
Age	1.00 (0.98 – 1.01)	1.00 (0.98 – 1.01)
Timepoint (FU > BL)	0.98 (0.88 – 1.11)	0.98 (0.87 – 1.11)
Intervention (Fiber > Placebo)	1.01 (0.90 – 1.13)	1.01 (0.90 – 1.13)
Timepoint * Intervention	1.03 (0.87 – 1.21)	1.03 (0.87 – 1.22)
Random Effects		
σ^2	3.29	3.29
T_{00}	0.45 Image	0.45 Image
	0.06 Subject	0.06 Subject
T_{11}	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.52 Subject.Statussimilar	0.52 Subject.Statussimilar
	0.84 Subject.Statusnew	0.85 Subject.Statusnew
	0.02 Subject.Typeplants	0.02 Subject.Typeplants
	0.02 Subject.Typeobjects	0.02 Subject.Typeobjects
	0.02 Subject.Styledali	0.02 Subject.Styledali
	0.02 Subject.Stylehundertwasser	0.02 Subject.Stylehundertwasser
	0.02 Subject.Styleklimt	0.02 Subject.Styleklimt
	0.01 Subject.Stylemunch	0.01 Subject.Stylemunch
	0.01 Subject.Stylepicasso	0.01 Subject.Stylepicasso
	0.02 Subject.Stylepointilism	0.02 Subject.Stylepointilism
	0.08 Subject.Stylepopart	0.08 Subject.Stylepopart
ρ_{01}		
ICC	0.21	0.21
N	56 Subject	56 Subject
	320 Image	320 Image
Observations	14182	14182
Marginal R ² / Conditional R ²	0.091 / 0.187	0.090 / 0.186

Table 4-1: Full and null BLRMs for the effect of z-scored subjective arousal image on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	2.43 (1.59 – 3.68)	2.44 (1.60 – 3.72)	2.41 (1.59 – 3.67)
Category (F > NF)	2.12 (1.80 – 2.47)	2.10 (1.79 – 2.46)	2.08 (1.78 – 2.45)
Wanting	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.07)
Image Status (similar > old)	0.66 (0.50 – 0.85)	0.65 (0.50 – 0.85)	0.65 (0.50 – 0.85)
Image Status (new > old)	5.43 (3.97 – 7.60)	5.36 (3.92 – 7.50)	5.40 (3.96 – 7.45)
Arousal	1.00 (0.87 – 1.14)	0.94 (0.87 – 1.01)	
Gender (M > F)	0.81 (0.67 – 0.96)	0.81 (0.67 – 0.98)	0.81 (0.67 – 0.97)
Age	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	1.01 (0.92 – 1.11)	1.01 (0.92 – 1.11)	1.01 (0.92 – 1.11)
Intervention (Fiber > Placebo)	1.04 (0.95 – 1.13)	1.04 (0.95 – 1.14)	1.04 (0.95 – 1.14)
Category (F > NF) * Arousal	0.91 (0.77 – 1.06)		
Timepoint * Intervention	1.01 (0.89 – 1.14)	1.01 (0.89 – 1.15)	1.01 (0.89 – 1.14)
Random Effects			
σ^2	3.29	3.29	3.29
T ₀₀	0.56 Image	0.57 Image	0.57 Image
	0.13 Subject	0.13 Subject	0.13 Subject
T ₁₁	0.07 Subject.CategoryF	0.07 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar
	0.89 Subject.Statusnew	0.89 Subject.Statusnew	0.90 Subject.Statusnew
	0.00 Subject.z_Arousal	0.00 Subject.z_Arousal	0.00 Subject.z_Arousal
ρ_{01}			
ICC	0.24	0.24	0.24
N	56 Subject	56 Subject	56 Subject
	629 Image	629 Image	629 Image
Observations	27917	27917	27917
Marginal R ² / Conditional R ²	0.080 / 0.199	0.080 / 0.199	0.079 / 0.199

Table 4-2: Full and null BLRMs for the effect of z-scored subjective valence image on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	2.51 (1.63 – 3.81)	2.50 (1.64 – 3.75)	2.53 (1.66 – 3.85)
Category (F > NF)	2.10 (1.79 – 2.44)	2.09 (1.78 – 2.46)	2.08 (1.78 – 2.44)
Wanting	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.08)	1.05 (1.02 – 1.07)
Image Status (similar > old)	0.65 (0.49 – 0.85)	0.65 (0.50 – 0.85)	0.64 (0.50 – 0.83)
Image Status (new > old)	5.39 (3.96 – 7.43)	5.41 (3.95 – 7.53)	5.29 (3.87 – 7.34)
Valence	1.05 (0.84 – 1.31)	0.92 (0.84 – 1.00)	
Gender (M > F)	0.82 (0.68 – 0.98)	0.82 (0.69 – 0.99)	0.82 (0.69 – 0.98)
Age	1.00 (0.98 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)
Intervention (Fiber > Placebo)	1.04 (0.96 – 1.14)	1.04 (0.96 – 1.14)	1.04 (0.96 – 1.14)
Category (F > NF) * Valence	0.86 (0.67 – 1.10)		
Timepoint * Intervention	1.00 (0.88 – 1.14)	1.00 (0.88 – 1.14)	1.00 (0.88 – 1.14)
Random Effects			
σ^2	3.29	3.29	3.29
T_{00}	0.55 Image	0.55 Image	0.56 Image
	0.13 Subject	0.13 Subject	0.13 Subject
T_{11}	0.07 Subject.CategoryF	0.07 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar
	0.88 Subject.Statusnew	0.88 Subject.Statusnew	0.89 Subject.Statusnew
	0.00 Subject.z_Valence	0.00 Subject.z_Valence	0.00 Subject.z_Valence
ρ_{01}			
ICC	0.24	0.24	0.24
N	56 Subject	56 Subject	56 Subject
	640 Image	640 Image	640 Image
Observations	28395	28395	28395
Marginal R ² / Conditional R ²	0.080 / 0.198	0.080 / 0.198	0.079 / 0.198

Table 4-3: Full and null BLRMs for the effect of z-scored subjective recognizability image on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	2.50 (1.64 – 3.80)	2.47 (1.62 – 3.86)	2.44 (1.61 – 3.71)
Category (F > NF)	2.10 (1.79 – 2.47)	2.10 (1.80 – 2.46)	2.08 (1.78 – 2.43)
Wanting	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.07)	1.05 (1.02 – 1.07)
Image Status (similar > old)	0.65 (0.51 – 0.85)	0.65 (0.50 – 0.84)	0.65 (0.50 – 0.85)
Image Status (new > old)	5.33 (3.91 – 7.43)	5.33 (3.84 – 7.36)	5.39 (3.94 – 7.55)
Recognizability	0.91 (0.76 – 1.08)	0.90 (0.82 – 0.99)	
Gender (M > F)	0.82 (0.69 – 0.99)	0.83 (0.69 – 0.98)	0.83 (0.69 – 0.99)
Age	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)
Intervention (Fiber > Placebo)	1.04 (0.96 – 1.14)	1.04 (0.95 – 1.14)	1.04 (0.96 – 1.14)
Category (F > NF) * Recognizability	0.99 (0.81 – 1.22)		
Timepoint * Intervention	1.01 (0.88 – 1.14)	1.01 (0.89 – 1.14)	1.00 (0.89 – 1.14)
Random Effects			
σ^2	3.29	3.29	3.29
T_{00}	0.55 Image	0.55 Image	0.56 Image
	0.13 Subject	0.13 Subject	0.13 Subject
T_{11}	0.07 Subject.CategoryF	0.07 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar
	0.88 Subject.Statusnew	0.89 Subject.Statusnew	0.88 Subject.Statusnew
	0.00 Subject.z_Recognizability	0.00 Subject.z_Recognizability	0.00 Subject.z_Recognizability
ρ_{01}			
ICC	0.24	0.24	0.24
N	56 Subject	56 Subject	56 Subject
	640 Image	640 Image	640 Image
Observations	28395	28395	28395
Marginal R ² / Conditional R ²	0.080 / 0.198	0.080 / 0.198	0.079 / 0.198

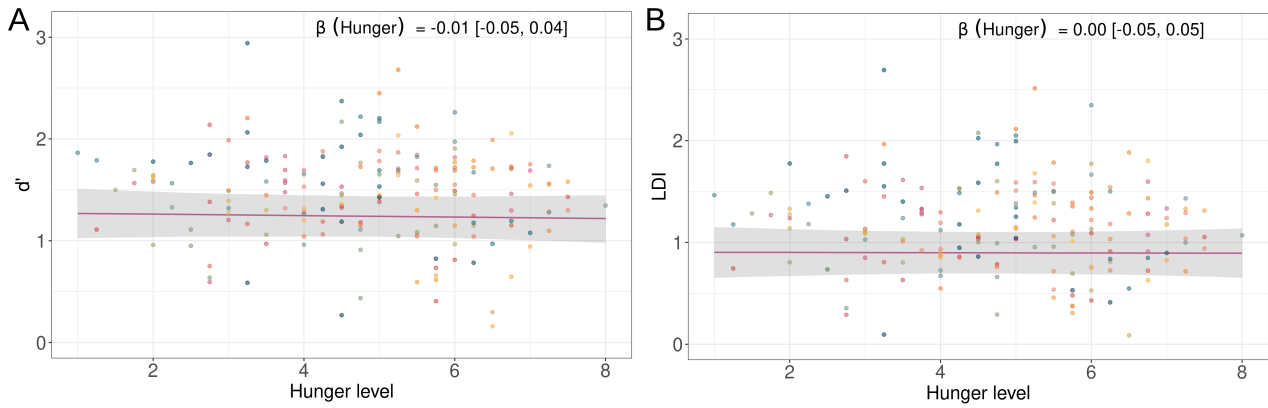


Figure 5-1: Memory performance depending on subjective hunger. Actual and predicted A) target recognition d' and B) lure discrimination LDI depending on subjective hunger level. Single subjects are colour-coded. Points show the actual data and lines with 95%-CI depict predictions based on full model. **Neither d' nor LDI were affected by the subjective hunger level.** The estimates of the main effect of the null model (Table 1, Eq. 9) suggested that the subjective hunger level did not affect memory performance in general.

Table 5-1: Full and null BLRMs for the effect of subjective hunger level on d' .

	full model	null model 1	null model 2
<i>Predictors for d'</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.31 (0.75 – 1.86)	1.32 (0.79 – 1.87)	1.28 (0.78 – 1.78)
Category (F > NF)	0.80 (0.28 – 1.34)	0.77 (0.26 – 1.23)	0.77 (0.21 – 1.27)
Subj Hunger Level	-0.01 (-0.05 – 0.04)	-0.01 (-0.05 – 0.04)	
Age	-0.00 (-0.02 – 0.02)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.02)
Gender (M > F)	-0.23 (-0.44 – -0.02)	-0.23 (-0.46 – -0.01)	-0.23 (-0.45 – -0.02)
Timepoint (FU > BL)	0.01 (-0.10 – 0.13)	0.01 (-0.10 – 0.12)	0.01 (-0.11 – 0.12)
Intervention (Fiber > Placebo)	0.06 (-0.05 – 0.17)	0.06 (-0.06 – 0.17)	0.05 (-0.06 – 0.16)
Category (F > NF) * Subj Hunger Level	-0.00 (-0.06 – 0.05)		
Timepoint * Intervention	-0.04 (-0.20 – 0.12)	-0.04 (-0.20 – 0.12)	-0.03 (-0.19 – 0.12)
Random Effects			
σ^2	0.14	0.14	0.14
T_{00}	0.04 Set	0.04 Set	0.04 Set
	0.09 Subject	0.09 Subject	0.09 Subject
T_{11}	0.24 Set.CategoryF	0.26 Set.CategoryF	0.31 Set.CategoryF
	0.04 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF
ρ_{01}			
ICC	0.66	0.67	0.68
N	56 Subject	56 Subject	56 Subject
	4 Set	4 Set	4 Set
Observations	360	360	360
Marginal R^2 / Conditional R^2	0.382 / 0.696	0.377 / 0.696	0.378 / 0.697

Table 5-2: Full and null BLRMs for the effect of subjective hunger level on LDI.

<i>Predictors for LDI</i>	full model <i>Estimates</i>	null model 1 <i>Estimates</i>	null model 2 <i>Estimates</i>
Intercept	1.04 (0.47 – 1.62)	1.05 (0.51 – 1.62)	1.04 (0.53 – 1.57)
Category (F > NF)	0.85 (0.22 – 1.41)	0.85 (0.34 – 1.38)	0.85 (0.29 – 1.48)
Subj Hunger Level	-0.00 (-0.05 – 0.05)	-0.00 (-0.05 – 0.05)	
Age	-0.00 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)
Gender (M > F)	-0.27 (-0.50 – -0.04)	-0.27 (-0.50 – -0.04)	-0.27 (-0.49 – -0.04)
Timepoint (FU > BL)	0.05 (-0.07 – 0.19)	0.06 (-0.07 – 0.18)	0.05 (-0.08 – 0.18)
Intervention (Fiber > Placebo)	0.09 (-0.04 – 0.21)	0.08 (-0.04 – 0.21)	0.08 (-0.04 – 0.21)
Category (F > NF) * Subj Hunger Level	0.00 (-0.06 – 0.07)		
Timepoint * Intervention	-0.08 (-0.26 – 0.10)	-0.08 (-0.26 – 0.10)	-0.08 (-0.25 – 0.10)
Random Effects			
σ^2	0.17	0.17	0.17
T ₀₀	0.04 Set	0.04 Set	0.04 Set
	0.10 Subject	0.10 Subject	0.10 Subject
T ₁₁	0.30 Set.CategoryF	0.28 Set.CategoryF	0.34 Set.CategoryF
	0.05 Subject.CategoryF	0.05 Subject.CategoryF	0.05 Subject.CategoryF
ρ_{01}			
ICC	0.63	0.62	0.65
N	56 Subject	56 Subject	56 Subject
	4 Set	4 Set	4 Set
Observations	360	360	360
Marginal R ² / Conditional R ²	0.398 / 0.677	0.402 / 0.677	0.396 / 0.676

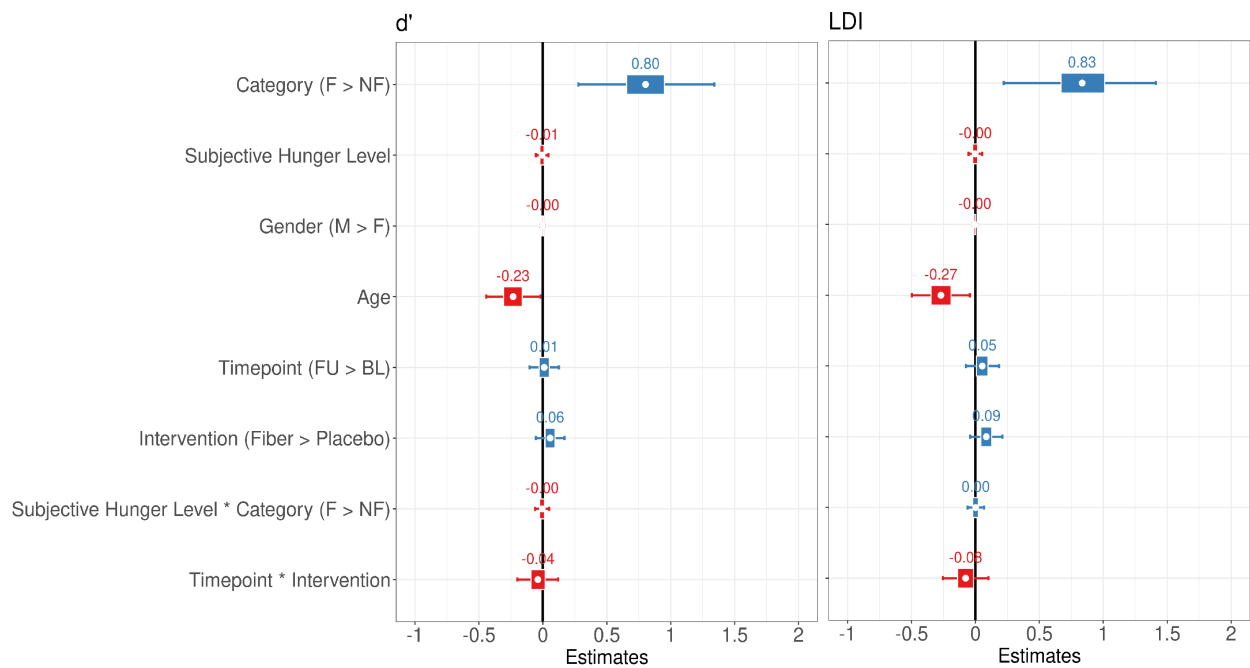


Figure 5-2: Model estimates of the full model for the effect of subjective hunger level and covariates (Table 1, Eq. 8) on d' and LDI. Values indicate the positive (blue) or negative (red) mean estimate of the posterior distribution and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. **The subjective hunger level did not differently affect image categories nor did it affect memory performance.** Only the effect of image category (F>NF) and Gender (M<F) on memory indices seemed to be evident as its 95% CI did not include Zero.

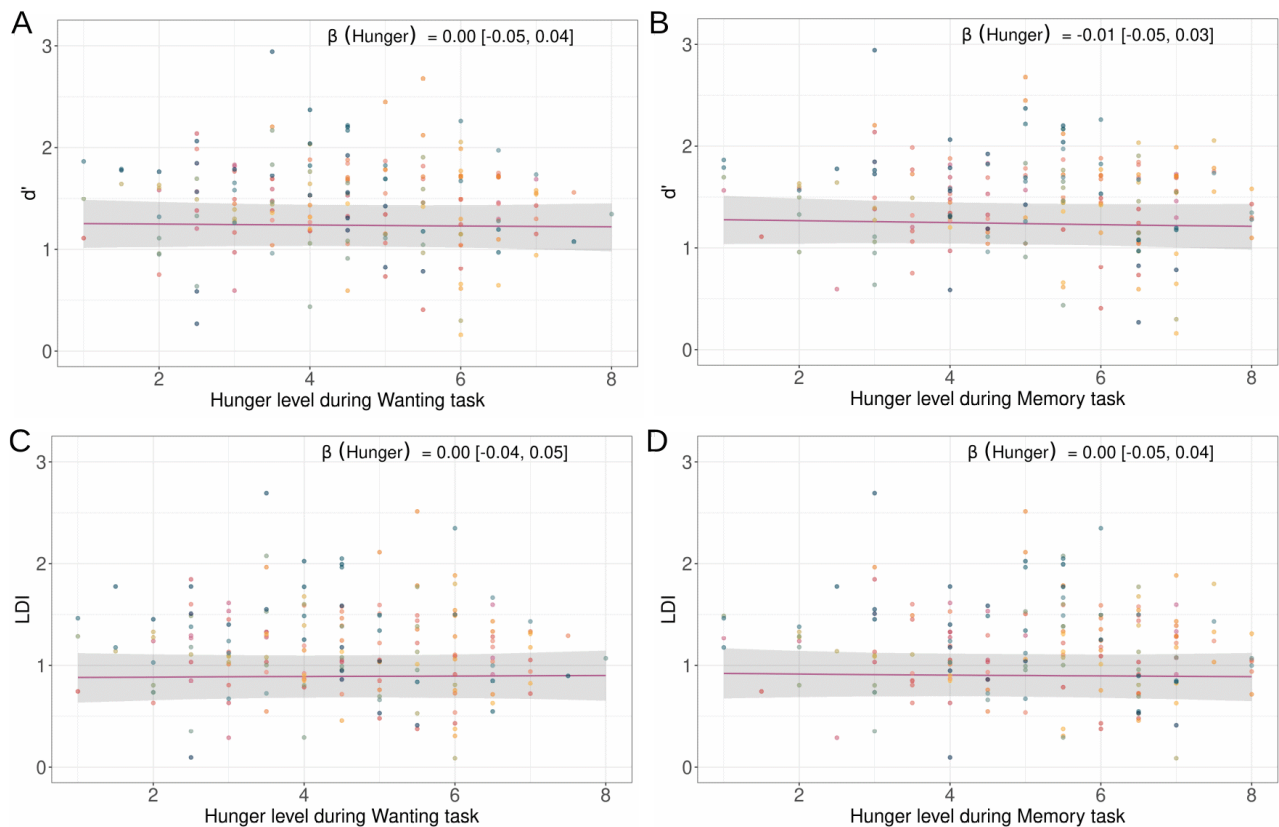


Figure 5-3: Memory performance depending on subjective hunger level per MRI task. Actual and predicted A+B) target recognition d' and C+D) lure discrimination LDI depending on subjective hunger level during A+C) Wanting task and B+D) Memory task. Single subjects are colour-coded. Points show the actual data and lines with 95%-CI depict predictions based on null model 1 (Table 1, Eq. 8). **Neither d' nor LDI were affected by the subjective hunger level during any of the tasks.**

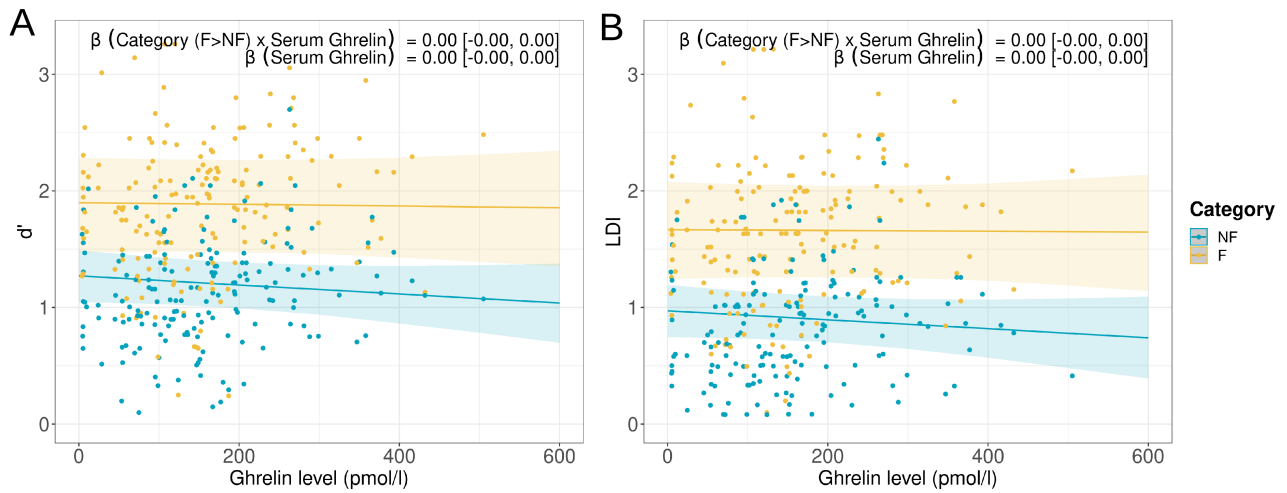


Figure 5-4: Actual and predicted A) target recognition d' and B) lure discrimination LDI depending on ghrelin serum levels per image category. Points show the actual data and lines with 95% CI depict predictions based on full model. Neither d' nor LDI were affected by ghrelin serum levels. The estimates of the interaction of the full model (cf. Table 1, Eq. 8) indicated that the **image categories were not differently influenced by ghrelin levels** and the estimates of the main effect suggested that **ghrelin serum levels did not affect memory performance indices independent of category**. For better visualization, the outlier 1274 pmol/l is not displayed.

Table 5-3: Full and null BLRMs for the effect of serum ghrelin levels on d'.

	full model	null model 1	null model 2	null model 3	null model 4
<i>Predictors for d'</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.41 (0.89 – 1.95)	1.41 (0.88 – 1.93)	1.38 (0.85 – 1.91)	1.37 (0.84 – 1.87)	1.36 (0.85 – 1.87)
Category (F > NF)	0.63 (-0.02 – 1.11)	0.63 (0.13 – 1.16)	0.64 (0.09 – 1.26)	0.66 (0.17 – 1.16)	0.66 (0.10 – 1.25)
Wanting Category (neutral > unwanted)	0.01 (-0.16 – 0.18)	0.01 (-0.16 – 0.18)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)
Wanting Category (wanted > unwanted)	-0.16 (-0.34 – 0.02)	-0.16 (-0.34 – 0.02)	-0.11 (-0.23 – 0.02)	-0.11 (-0.23 – 0.01)	-0.10 (-0.23 – 0.01)
Serum ghrelin levels	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	
Gender (M > F)	-0.30 (-0.53 – -0.08)	-0.30 (-0.54 – -0.07)	-0.30 (-0.51 – -0.08)	-0.29 (-0.52 – -0.07)	-0.29 (-0.51 – -0.07)
Age	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)
Timepoint (FU > BL)	0.06 (-0.05 – 0.18)	0.06 (-0.05 – 0.18)	0.06 (-0.05 – 0.18)	0.06 (-0.05 – 0.18)	0.06 (-0.05 – 0.18)
Intervention (Fiber > Placebo)	0.02 (-0.09 – 0.14)	0.02 (-0.09 – 0.14)	0.03 (-0.09 – 0.14)	0.02 (-0.09 – 0.14)	0.02 (-0.08 – 0.14)
Category (F > NF) * Serum ghrelin levels	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)		
Wanting Category (neutral > unwanted) * Serum ghrelin levels	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)			
Wanting Category (wanted > unwanted) * Serum ghrelin levels	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)			
Timepoint * Intervention	-0.02 (-0.19 – 0.14)	-0.02 (-0.18 – 0.14)	-0.03 (-0.19 – 0.14)	-0.02 (-0.19 – 0.14)	-0.02 (-0.19 – 0.14)
Category (F > NF) * Wanting Category (neutral > unwanted) * Serum ghrelin levels	-0.00 (-0.00 – 0.00)				
Category (F > NF) * Wanting Category (wanted > unwanted) * Serum ghrelin levels	-0.00 (-0.00 – 0.00)				
Random Effects					
σ^2	0.40	0.39	0.39	0.39	0.39
T_{00}	0.03 Set	0.03 Set	0.03 Set	0.02 Set	0.03 Set
	0.10 Subject	0.10 Subject	0.09 Subject	0.09 Subject	0.09 Subject
T_{11}	0.33 Set.CategoryF	0.30 Set.CategoryF	0.44 Set.CategoryF	0.27 Set.CategoryF	0.33 Set.CategoryF
	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF
	0.04 Subject.Wanting_catneutral	0.04 Subject.Wanting_catneutral	0.04 Subject.Wanting_catneutral	0.04 Subject.Wanting_catneutral	0.04 Subject.Wanting_catneutral
	0.07 Subject.Wanting_catwanted	0.07 Subject.Wanting_catwanted	0.07 Subject.Wanting_catwanted	0.07 Subject.Wanting_catwanted	0.07 Subject.Wanting_catwanted
	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL
P_{01}					
ICC	0.47	0.46	0.51	0.44	0.47
N	54 Subject	54 Subject	54 Subject	54 Subject	54 Subject
	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	986	986	986	986	986
Marginal R ² / Conditional R ²	0.212 / 0.416	0.210 / 0.416	0.210 / 0.415	0.208 / 0.414	0.208 / 0.414

Table 5-4: Full and null BLRMs for the effect of serum ghrelin levels on LDI.

Predictors for LDI	full model	null model 1	null model 2	null model 3	null model 4
	Estimates	Estimates	Estimates	Estimates	Estimates
Intercept	1.21 (0.69 – 1.75)	1.20 (0.67 – 1.74)	1.21 (0.68 – 1.75)	1.19 (0.66 – 1.71)	1.15 (0.63 – 1.65)
Category (F > NF)	0.70 (0.11 – 1.26)	0.70 (0.14 – 1.28)	0.69 (0.10 – 1.20)	0.72 (0.17 – 1.26)	0.72 (0.19 – 1.23)
Wanting Category (neutral > unwanted)	0.04 (-0.13 – 0.21)	0.04 (-0.14 – 0.21)	0.04 (-0.07 – 0.16)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)
Wanting Category (wanted > unwanted)	-0.02 (-0.21 – 0.18)	-0.02 (-0.21 – 0.18)	-0.02 (-0.16 – 0.11)	-0.02 (-0.15 – 0.10)	-0.02 (-0.15 – 0.11)
Serum ghrelin levels	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	
Gender (M > F)	-0.33 (-0.56 – -0.10)	-0.33 (-0.56 – -0.09)	-0.33 (-0.56 – -0.10)	-0.33 (-0.56 – -0.10)	-0.31 (-0.54 – -0.09)
Age	-0.01 (-0.03 – 0.01)	-0.01 (-0.03 – 0.01)	-0.01 (-0.03 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.03 – 0.01)
Timepoint (FU > BL)	0.06 (-0.07 – 0.19)	0.06 (-0.07 – 0.19)	0.06 (-0.07 – 0.19)	0.06 (-0.07 – 0.18)	0.06 (-0.06 – 0.19)
Intervention (Fiber > Placebo)	0.04 (-0.08 – 0.16)	0.04 (-0.08 – 0.17)	0.04 (-0.08 – 0.17)	0.04 (-0.08 – 0.17)	0.05 (-0.07 – 0.17)
Category (F > NF) * Serum ghrelin levels	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)		
Wanting Category (neutral > unwanted) * Serum ghrelin levels	0.00 (-0.00 – 0.00)	0.00 (-0.00 – 0.00)			
Wanting Category (wanted > unwanted) * Serum ghrelin levels	0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)			
Timepoint * Intervention	-0.01 (-0.19 – 0.17)	-0.00 (-0.19 – 0.18)	-0.01 (-0.19 – 0.17)	-0.01 (-0.18 – 0.17)	-0.00 (-0.18 – 0.17)
Category (F > NF) * Wanting Category (neutral > unwanted) * Serum ghrelin levels	-0.00 (-0.00 – 0.00)				
Category (F > NF) * Wanting Category (wanted > unwanted) * Serum ghrelin levels	-0.00 (-0.00 – 0.00)				
Random Effects					
σ^2	0.47	0.47	0.46	0.46	0.46
T ₀₀	0.02 Set	0.02 Set	0.02 Set	0.02 Set	0.03 Set
	0.11 Subject	0.11 Subject	0.11 Subject	0.11 Subject	0.10 Subject
T ₁₁	0.35 Set.CategoryF	0.31 Set.CategoryF	0.32 Set.CategoryF	0.31 Set.CategoryF	0.33 Set.CategoryF
	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF
	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral
	0.08 Subject.Wanting_catwanted	0.08 Subject.Wanting_catwanted	0.08 Subject.Wanting_catwanted	0.08 Subject.Wanting_catwanted	0.08 Subject.Wanting_catwanted
	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL	0.00 Subject.serum_GHRL
P ₀₁					
ICC	0.43	0.42	0.42	0.42	0.43
N	54 Subject	54 Subject	54 Subject	54 Subject	54 Subject
	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	975	975	975	975	975
Marginal R ² / Conditional R ²	0.220 / 0.406	0.218 / 0.405	0.217 / 0.404	0.217 / 0.403	0.216 / 0.403

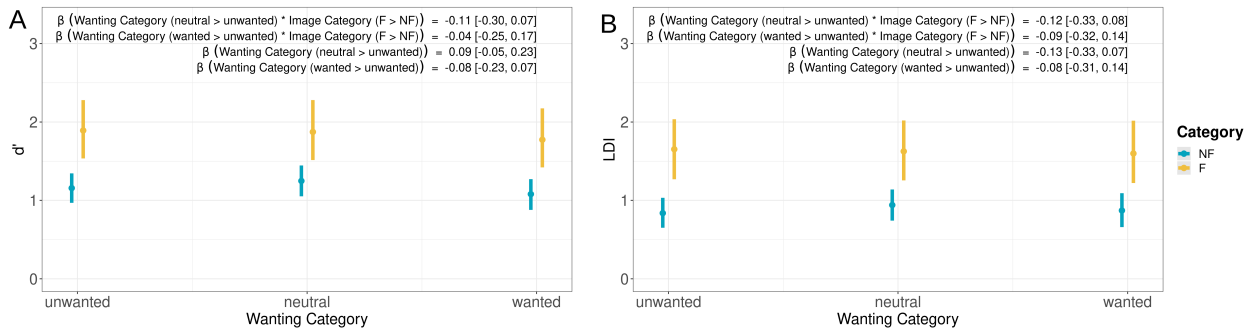


Figure 6-1: Predicted A) target recognition d' and B) lure discrimination LDI depending on wanting category. Predictions based on full model (Table 1, Eq. 11) with 95% CI. **Neither d' nor LDI were predicted by wanting category.** The estimates of the full model for the interaction indicated that the **image categories were not differently influenced by wanting category.** The estimates for the main effect suggested that the wanting category did not affect memory performance indices in general.

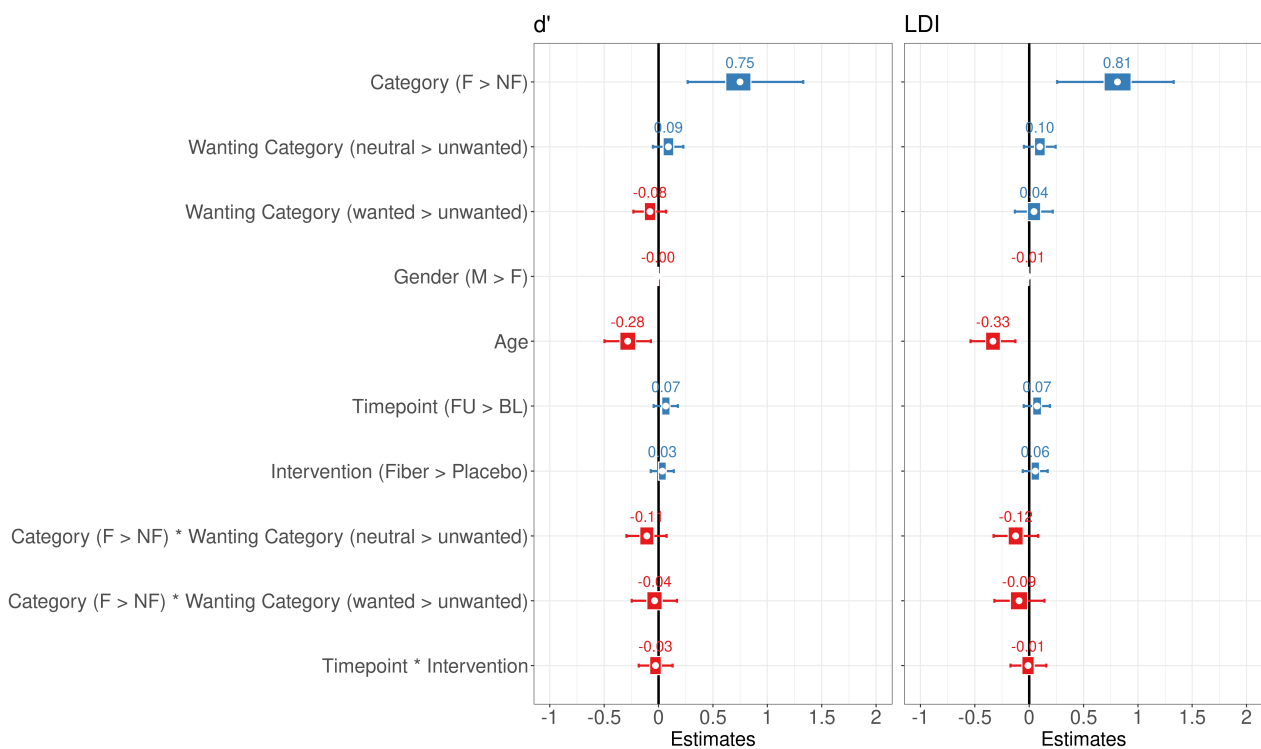


Figure 6-2: Model estimates of the full model (Table 1, Eq. 11) for the effect of wanting category and covariates on d' and LDI. Values indicate the positive (blue) or negative (red) mean estimate of the posterior distribution and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CIs. **Neither d' nor LDI are evidently different between wanting categories.** Only the effect of image category (F>NF) and Gender (M<F) on memory performance measures seemed to be evident as their 95% CI did not include Zero.

Table 6-1: Full and null BLRMs for the effect of wanting categories on d' .

<i>Predictors for d'</i>	full model	null model 1	null model 2
	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.29 (0.79 – 1.77)	1.31 (0.79 – 1.78)	1.29 (0.81 – 1.79)
Category (F > NF)	0.73 (0.27 – 1.33)	0.68 (0.09 – 1.18)	0.68 (0.19 – 1.17)
Wanting Category (neutral > unwanted)	0.09 (-0.05 – 0.23)	0.04 (-0.07 – 0.14)	
Wanting Category (wanted > unwanted)	-0.08 (-0.23 – 0.07)	-0.10 (-0.22 – 0.02)	
Age	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)
Gender (M > F)	-0.28 (-0.50 – -0.07)	-0.29 (-0.49 – -0.07)	-0.28 (-0.50 – -0.07)
Timepoint (FU > BL)	0.07 (-0.04 – 0.18)	0.07 (-0.05 – 0.18)	0.07 (-0.05 – 0.18)
Intervention (Fiber > Placebo)	0.04 (-0.07 – 0.14)	0.03 (-0.07 – 0.14)	0.03 (-0.08 – 0.14)
Category (F > NF) * Wanting Category (neutral > unwanted)	-0.11 (-0.30 – 0.07)		
Category (F > NF) * Wanting Category (wanted > unwanted)	-0.04 (-0.25 – 0.17)		
Timepoint * Intervention	-0.03 (-0.18 – 0.13)	-0.03 (-0.19 – 0.13)	-0.03 (-0.19 – 0.13)
Random Effects			
σ^2	0.39	0.39	0.39
T_{00}	0.02 Set	0.02 Set	0.02 Set
	0.09 Subject	0.09 Subject	0.09 Subject
T_{11}	0.29 Set.CategoryF	0.32 Set.CategoryF	0.27 Set.CategoryF
	0.03 Subject.CategoryF	0.02 Subject.CategoryF	0.02 Subject.CategoryF
	0.04 Subject.Wanting_catneutral	0.04 Subject.Wanting_catneutral	0.05 Subject.Wanting_catneutral
	0.06 Subject.Wanting_catwanted	0.06 Subject.Wanting_catwanted	0.06 Subject.Wanting_catwanted
	0.02 Subject.CategoryF:Wanting_catneutral	0.02 Subject.CategoryF:Wanting_catneutral	0.02 Subject.CategoryF:Wanting_catneutral
	0.11 Subject.CategoryF:Wanting_catwanted	0.10 Subject.CategoryF:Wanting_catwanted	0.10 Subject.CategoryF:Wanting_catwanted
P_{01}			
P_{01}			
ICC	0.45	0.45	0.39
N	56 Subject	56 Subject	56 Subject
	4 Set	4 Set	4 Set
Observations	1046	1046	1046
Marginal R^2 / Conditional R^2	0.216 / 0.430	0.213 / 0.428	0.206 / 0.427

Table 6-2: Full and null BLRMs for the effect of wanting categories on LDI.

<i>Predictors for LDI</i>	full model	null model 1	null model 2
	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.07 (0.57 – 1.57)	1.11 (0.61 – 1.60)	1.12 (0.63 – 1.60)
Category (F > NF)	0.81 (0.28 – 1.41)	0.74 (0.20 – 1.29)	0.74 (0.19 – 1.26)
Wanting Category (neutral > unwanted)	0.10 (-0.04 – 0.25)	0.04 (-0.07 – 0.15)	
Wanting Category (wanted > unwanted)	0.03 (-0.14 – 0.21)	-0.01 (-0.14 – 0.12)	
Age	-0.01 (-0.03 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)
Gender (M > F)	-0.30 (-0.51 – -0.09)	-0.31 (-0.52 – -0.09)	-0.30 (-0.52 – -0.09)
Timepoint (FU > BL)	0.06 (-0.06 – 0.19)	0.07 (-0.05 – 0.19)	0.07 (-0.06 – 0.19)
Intervention (Fiber > Placebo)	0.05 (-0.06 – 0.16)	0.05 (-0.06 – 0.17)	0.05 (-0.07 – 0.18)
Category (F > NF) * Wanting Category (neutral > unwanted)	-0.13 (-0.33 – 0.07)		
Category (F > NF) * Wanting Category (wanted > unwanted)	-0.08 (-0.31 – 0.14)		
Timepoint * Intervention	-0.00 (-0.18 – 0.16)	-0.01 (-0.18 – 0.16)	-0.01 (-0.18 – 0.17)
Random Effects			
σ^2	0.45	0.45	0.45
T_{00}	0.03 Set	0.02 Set	0.03 Set
	0.10 Subject	0.10 Subject	0.10 Subject
T_{11}	0.31 Set.CategoryF	0.32 Set.CategoryF	0.31 Set.CategoryF
	0.03 Subject.CategoryF	0.03 Subject.CategoryF	0.03 Subject.CategoryF
	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral	0.03 Subject.Wanting_catneutral
	0.13 Subject.Wanting_catwanted	0.13 Subject.Wanting_catwanted	0.12 Subject.Wanting_catwanted
	0.02 Subject.CategoryF:Wanting_catneutral	0.02 Subject.CategoryF:Wanting_catneutral	0.02 Subject.CategoryF:Wanting_catneutral
	0.15 Subject.CategoryF:Wanting_catwanted	0.14 Subject.CategoryF:Wanting_catwanted	0.14 Subject.CategoryF:Wanting_catwanted
P_{01}			
P_{01}			
ICC	0.43	0.43	0.38
N	56 Subject	56 Subject	56 Subject
	4 Set	4 Set	4 Set
Observations	1035	1035	1035
Marginal R ² / Conditional R ²	0.222 / 0.428	0.220 / 0.426	0.218 / 0.424

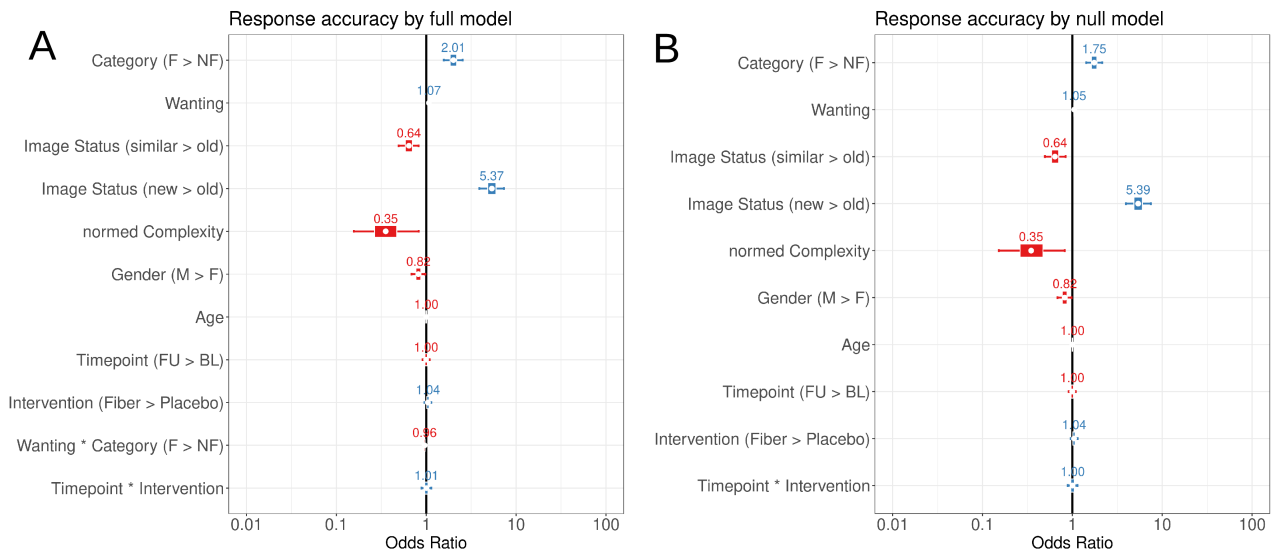


Figure 7-1: Odds ratios for the effect of single item wanting, image category and covariates on response accuracy: A) full model (Table 1, Eq. 13), B) null model 1 (Table 1, Eq. 14). Values indicate the positive (blue) or negative (red) median odds ratio (exponentiated regression coefficients) and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. A) The interaction of wanting with image category shows a tendency that the response accuracy for NF (art) images might be slightly more enhanced by wanting but B) shows that, in general, **single item wanting seemed to be evidently enhancing response accuracy** as its 95% CI did not include Zero.

Table 7-1: Full and null BLRMs for the effect of single image wanting ratings on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	3.75 (2.15 – 6.42)	3.96 (2.25 – 6.83)	4.44 (2.62 – 7.64)
Category (F > NF)	2.01 (1.57 – 2.55)	1.75 (1.43 – 2.15)	1.82 (1.48 – 2.21)
Wanting	1.07 (1.04 – 1.11)	1.05 (1.02 – 1.07)	
Image Status (similar > old)	0.64 (0.49 – 0.82)	0.64 (0.49 – 0.84)	0.62 (0.47 – 0.81)
Image Status (new > old)	5.37 (3.90 – 7.34)	5.39 (3.94 – 7.49)	5.18 (3.73 – 7.28)
normed Complexity	0.35 (0.16 – 0.83)	0.35 (0.15 – 0.82)	0.34 (0.15 – 0.78)
Gender (M > F)	0.82 (0.69 – 0.97)	0.82 (0.68 – 0.98)	0.84 (0.70 – 1.00)
Age	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)	0.99 (0.91 – 1.09)
Intervention (Fiber > Placebo)	1.04 (0.95 – 1.14)	1.04 (0.96 – 1.14)	1.04 (0.96 – 1.14)
Wanting * Category (F > NF)	0.96 (0.92 – 1.00)		
Timepoint * Intervention	1.01 (0.89 – 1.14)	1.00 (0.89 – 1.14)	1.00 (0.88 – 1.14)
Random Effects			
σ^2	3.29	3.29	3.29
T ₀₀	0.55 Image	0.55 Image	0.55 Image
	0.13 Subject	0.13 Subject	0.14 Subject
T ₁₁	0.07 Subject.CategoryF	0.07 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.65 Subject.Statussimilar	0.66 Subject.Statussimilar	0.66 Subject.Statussimilar
	0.89 Subject.Statusnew	0.89 Subject.Statusnew	0.89 Subject.Statusnew
ρ_{01}			
ICC	0.24	0.24	0.23
N	56 Subject	56 Subject	56 Subject
	640 Image	640 Image	640 Image
Observations	28395	28395	28395
Marginal R ² / Conditional R ²	0.081 / 0.198	0.080 / 0.198	0.081 / 0.197

Table 7-2: Full BLRM for the effect of food wanting ratings on response accuracy accounted for normed complexity.

	full model
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>
Intercept	11.07 (5.75 – 21.93)
Wanting	1.03 (1.00 – 1.07)
Image Status (similar > old)	0.79 (0.54 – 1.15)
Image Status (new > old)	6.06 (3.98 – 9.67)
Calorie Quartile (cal2 > cal1)	1.09 (0.80 – 1.49)
Calorie Quartile (cal3 > cal1)	1.27 (0.95 – 1.73)
Calorie Quartile (cal4 > cal1)	1.37 (1.01 – 1.91)
Normed Complexity	0.13 (0.03 – 0.51)
Gender (M > F)	0.66 (0.52 – 0.84)
Age	0.99 (0.97 – 1.01)
Timepoint (FU > BL)	1.03 (0.89 – 1.18)
Intervention (Fiber > Placebo)	1.12 (0.98 – 1.28)
Timepoint * Intervention	0.94 (0.77 – 1.14)
Random Effects	
σ^2	3.29
T ₀₀ Image	0.70
T ₀₀ Subject	0.31
T ₁₁ Subject.Wanting	0.00
T ₁₁ Subject.Statussimilar	1.18
T ₁₁ Subject.Statusnew	1.09
T ₁₁ Subject.Typecal2	0.10
T ₁₁ Subject.Typecal3	0.09
T ₁₁ Subject.Typecal4	0.04
T ₁₁ Subject.complexity_norm	0.49
ρ_{01}	
ρ_{01}	
ICC	0.30
N _{Subject}	57
N _{Image}	320
Observations	14293
Marginal R ² / Conditional R ²	0.043 / 0.205

Table 7-3: Full BLRM for the effect of art wanting ratings on response accuracy accounted for normed complexity.

Predictors for response accuracy	full model
	Odds Ratios
Intercept	6.22 (2.44 – 16.28)
Wanting	1.08 (1.04 – 1.11)
Image Status (similar > old)	0.55 (0.42 – 0.72)
Image Status (new > old)	5.07 (3.67 – 7.23)
Type (plants > animals)	0.81 (0.59 – 1.10)
Type (objects > animals)	0.96 (0.75 – 1.22)
Style (DalÁ > Azulejos)	0.58 (0.37 – 0.90)
Style (Hundertwasser > Azulejos)	0.59 (0.40 – 0.87)
Style (Klirnt > Azulejos)	0.89 (0.62 – 1.24)
Style (Munch > Azulejos)	0.72 (0.46 – 1.09)
Style (Picasso > Azulejos)	0.76 (0.50 – 1.09)
Style (Pointilism > Azulejos)	0.77 (0.53 – 1.10)
Style (popart > Azulejos)	0.74 (0.50 – 1.07)
normed Complexity	0.23 (0.05 – 1.09)
Gender (M > F)	0.88 (0.73 – 1.06)
Age	1.00 (0.98 – 1.01)
Timepoint (FU > BL)	0.99 (0.88 – 1.12)
Intervention (Fiber > Placebo)	1.01 (0.91 – 1.14)
Timepoint * Intervention	1.03 (0.87 – 1.21)
Random Effects	
σ^2	3.29
T00 Image	0.45
T00 Subject	0.03
T11 Subject.Wanting	0.00
T11 Subject.Statussimilar	0.53
T11 Subject.Statusnew	0.83
T11 Subject.Typeplants	0.02
T11 Subject.Typeobjects	0.02
T11 Subject.Styledali	0.02
T11 Subject.Stylehundertwasser	0.02
T11 Subject.Styleklirnt	0.03
T11 Subject.Stylemunch	0.01
T11 Subject.Stylepicasso	0.01
T11 Subject.Stylepointilism	0.02
T11 Subject.Stylepopart	0.08
T11 Subject.complexity_norm	0.30
ρ_{01}	
ρ_{01}	
ICC	0.21
N Subject	57
N Image	320
Observations	14262
Marginal R ² / Conditional R ²	0.091 / 0.187



Figure 8-1: Predicted response accuracy for low, medium and high wanting ratings separately. Predictions based on the full model (Table 1, Eq. 17). Mean predictions and their 95% CI are depicted. The interaction of wanting with status (similar>old) suggested that **discrimination accuracy of similar images was not moderated by wanting ratings.**

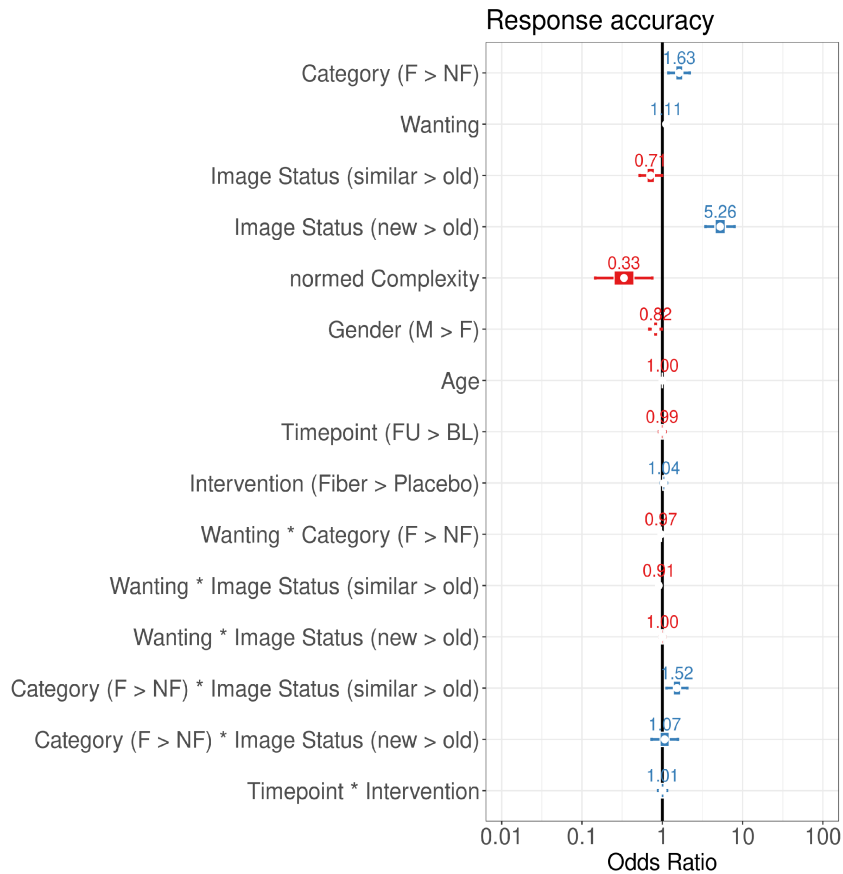


Figure 8-2: Odds ratios of the full model for the effect of wanting rating, images status (new, old, similar), image category (F, NF) and covariates on response accuracy considering. Values indicate the positive (blue) or negative (red) median odds ratio (exponentiated regression coefficients) and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. **Similar images are evidently worse discriminated among art compared to food images and discrimination performance of similar images is not moderated by wanting** as the interactions' 95% CI did not include Zero. **Memory accuracy is highest for new and lowest for similar images.**

Table 8-1: Full and null BLRMs for the effect of single image wanting ratings of new, old and similar images respectively on response accuracy.

	full model	null model 1	null model 2	null model 3
<i>Predictors for response accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	3.64 (2.10 – 6.37)	3.25 (1.89 – 5.72)	3.75 (2.15 – 6.42)	3.96 (2.25 – 6.83)
Category (F > NF)	1.63 (1.19 – 2.20)	1.99 (1.55 – 2.53)	2.01 (1.57 – 2.55)	1.75 (1.43 – 2.15)
Wanting	1.11 (1.07 – 1.15)	1.11 (1.07 – 1.15)	1.07 (1.04 – 1.11)	1.05 (1.02 – 1.07)
Image Status (similar > old)	0.71 (0.52 – 0.99)	0.85 (0.64 – 1.13)	0.64 (0.49 – 0.82)	0.64 (0.49 – 0.84)
Image Status (new > old)	5.26 (3.44 – 7.95)	5.44 (3.78 – 8.01)	5.37 (3.90 – 7.34)	5.39 (3.94 – 7.49)
normed Complexity	0.33 (0.15 – 0.75)	0.37 (0.16 – 0.85)	0.35 (0.16 – 0.83)	0.35 (0.15 – 0.82)
Gender (M > F)	0.82 (0.69 – 0.98)	0.82 (0.69 – 0.98)	0.82 (0.69 – 0.97)	0.82 (0.68 – 0.98)
Age	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)	1.00 (0.99 – 1.01)
Timepoint (FU > BL)	0.99 (0.91 – 1.09)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)
Intervention (Fiber > Placebo)	1.04 (0.96 – 1.14)	1.04 (0.95 – 1.14)	1.04 (0.95 – 1.14)	1.04 (0.96 – 1.14)
Wanting * Category (F > NF)	0.97 (0.93 – 1.01)	0.97 (0.93 – 1.01)	0.96 (0.92 – 1.00)	
Wanting * Image Status (similar > old)	0.91 (0.87 – 0.95)	0.92 (0.88 – 0.96)		
Wanting * Image Status (new > old)	1.00 (0.93 – 1.07)	1.00 (0.93 – 1.07)		
Category (F > NF) * Image Status (similar > old)	1.52 (1.13 – 2.05)			
Category (F > NF) * Image Status (new > old)	1.07 (0.74 – 1.57)			
Timepoint * Intervention	1.01 (0.88 – 1.14)	1.01 (0.89 – 1.14)	1.01 (0.89 – 1.14)	1.00 (0.89 – 1.14)
Random Effects				
σ^2	3.29	3.29	3.29	3.29
T_{00}	0.55 Image	0.56 Image	0.55 Image	0.55 Image
	0.13 Subject	0.13 Subject	0.13 Subject	0.13 Subject
T_{11}	0.06 Subject.CategoryF	0.06 Subject.CategoryF	0.07 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	0.64 Subject.Statussimilar	0.65 Subject.Statussimilar	0.65 Subject.Statussimilar	0.66 Subject.Statussimilar
	0.89 Subject.Statusnew	0.90 Subject.Statusnew	0.89 Subject.Statusnew	0.89 Subject.Statusnew
ρ_{01}				
ρ_{01}				
ICC	0.24	0.24	0.24	0.24
N	56 Subject 640 Image	56 Subject 640 Image	56 Subject 640 Image	56 Subject 640 Image
Observations	28395	28395	28395	28395
Marginal R ² / Conditional R ²	0.086 / 0.199	0.080 / 0.198	0.081 / 0.198	0.080 / 0.198

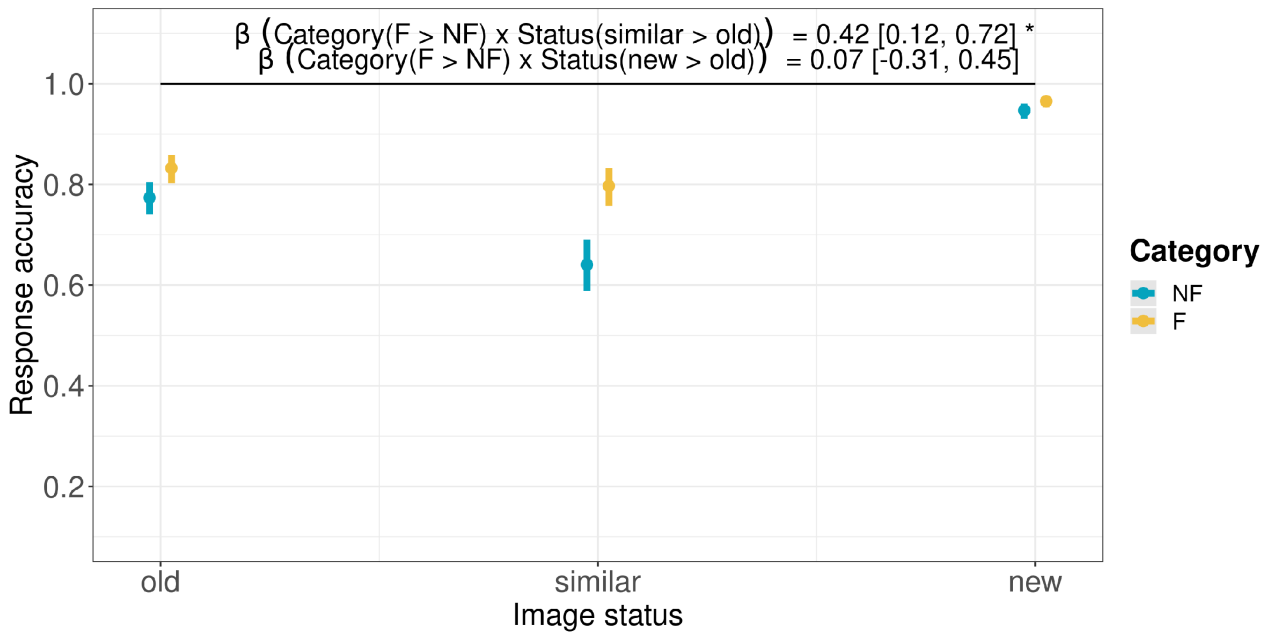


Figure 8-3: Predicted response accuracy for old, similar and new images per image category. Predictions based on the full model (Table 1, Eq. 17). Mean predictions and their 95% CI are depicted. The interaction of category with status (similar>old) suggested that **discrimination accuracy of similar images was evidently different between food and art images.**

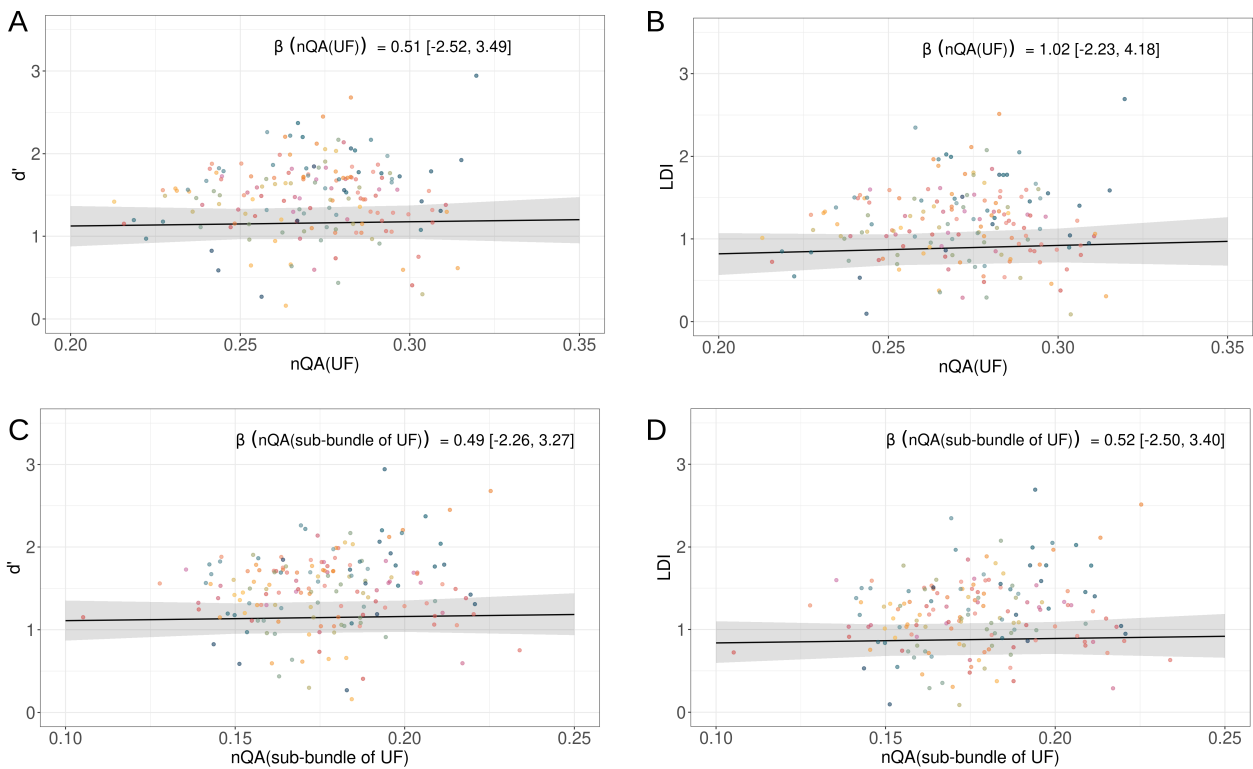


Figure 10-1: Memory performance depending on microstructural coherence of UF and its sub-bundle. Actual and predicted A+C) target recognition d' and B+D) lure discrimination LDI depending on normalized quantitative anisotropy (nQA) of the uncinate fasciculus (UF, A&B) and its sub-bundle (C&D). Points show the actual data and lines with 95%-CI depict predictions based on null models (Table 1, Eq. 22 & Table 2, Eq. 27). **Neither d' nor LDI were affected by the microstructural coherence of the UF, reflected in nQA, or by its sub-bundle.**

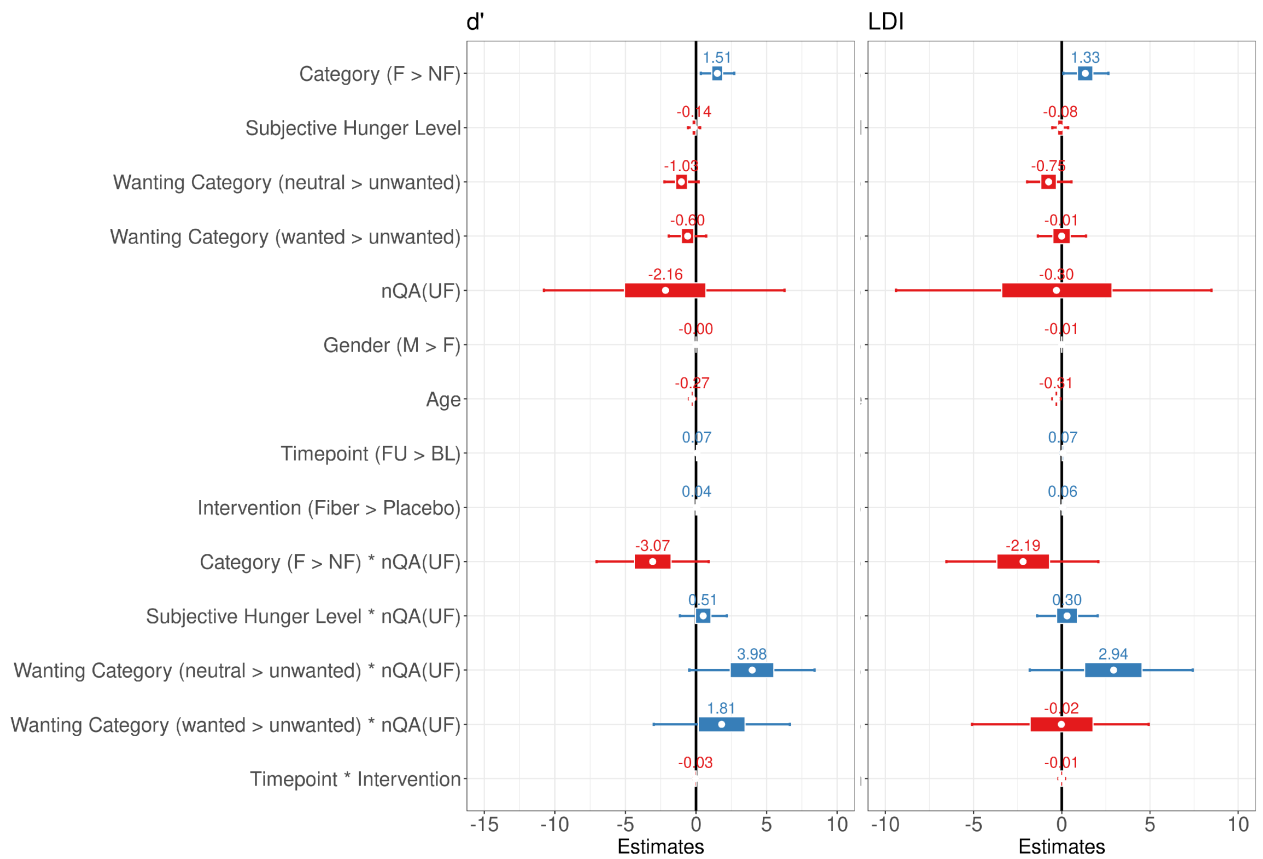


Figure 10-2: Model estimates of the full model (Table 1, Eq. 21) for the effect of microstructural properties of the UF and covariates on d' and LDI. Values indicate the positive (blue) or negative (red) mean estimate of the posterior distribution and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CIs. **The UF neither moderated effects of wanting category, subj. hunger level or image category on memory performance, nor predicted its microstructural coherence d' or LDI.** Only the effect of image category ($F > NF$) on memory performance measures seemed to be evident as its 95% CI did not include Zero.

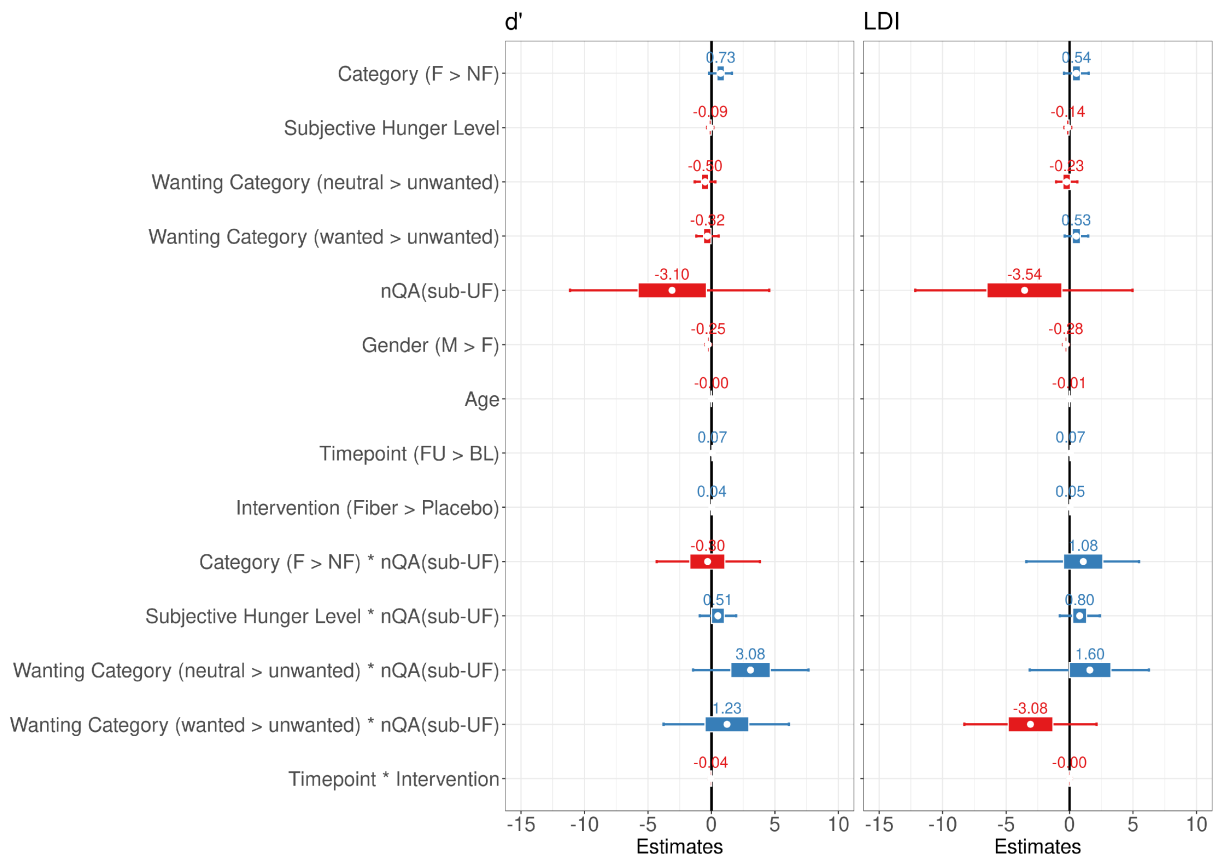


Figure 10-3: Model estimates of the full model (Table 2, Eq. 26) for the effect of microstructural properties of the sub-bundle of the UF and covariates on d' and LDI. Values indicate the positive (blue) or negative (red) mean estimate of the posterior distribution and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CIs. **The sub-bundle of the UF, which connects OFC and MTL, neither moderated effects of wanting category nor of subj. hunger level nor of image category on memory performance, nor predicted its microstructural coherence d' or LDI.** Only the effect of Gender ($M < F$) on memory performance measures seems to be evident as its 95% CI do not include Zero.

Table 10-1-1: Full and null (1-7) BLRMs for the effect of microstructural coherence of the UF on d'.

Predictors for d'	full model	null model 1	null model 2	null model 3	null model 4	null model 5	null model 6	null model 7
	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates
Intercept	1.84 (-0.50 - 4.19)	1.41 (-0.86 - 3.60)	1.22 (-0.08 - 2.53)	2.10 (-0.21 - 4.38)	1.59 (0.39 - 2.85)	1.70 (-0.51 - 3.88)	0.74 (-0.41 - 1.91)	1.13 (0.11 - 2.15)
Category (F > NF)	1.50 (0.34 - 2.71)	1.50 (0.32 - 2.73)	1.54 (0.34 - 2.72)	0.68 (0.20 - 1.17)	0.68 (0.18 - 1.22)	0.67 (0.10 - 1.14)	1.48 (0.27 - 2.69)	0.67 (0.06 - 1.16)
Subjective Hunger Level	-0.14 (-0.57 - 0.30)	-0.15 (-0.57 - 0.27)	-0.01 (-0.05 - 0.04)	-0.12 (-0.54 - 0.31)	-0.01 (-0.05 - 0.04)	-0.13 (-0.55 - 0.29)	-0.01 (-0.05 - 0.04)	-0.01 (-0.05 - 0.04)
Wanting Category (neutral > unwanted)	-1.04 (-2.24 - 0.19)	0.05 (-0.06 - 0.15)	-1.05 (-2.27 - 0.22)	-1.00 (-2.21 - 0.21)	-1.03 (-2.23 - 0.20)	0.04 (-0.07 - 0.15)	0.05 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)
Wanting Category (wanted > unwanted)	-0.59 (-1.93 - 0.72)	-0.10 (-0.22 - 0.01)	-0.65 (-2.02 - 0.68)	-0.59 (-1.91 - 0.74)	-0.59 (-1.93 - 0.79)	-0.10 (-0.22 - 0.02)	-0.10 (-0.23 - 0.02)	-0.10 (-0.22 - 0.02)
nQA(UF)	-2.12 (-10.77 - 6.28)	-0.69 (-8.78 - 7.55)	0.17 (-4.10 - 4.38)	-3.11 (-11.40 - 5.20)	-1.12 (-5.02 - 2.73)	-1.65 (-9.63 - 6.42)	1.91 (-1.74 - 5.48)	0.53 (-2.51 - 3.43)
Age	-0.00 (-0.02 - 0.01)	-0.00 (-0.02 - 0.02)	-0.00 (-0.02 - 0.01)	-0.00 (-0.02 - 0.02)	-0.00 (-0.02 - 0.01)	-0.00 (-0.02 - 0.01)	-0.00 (-0.02 - 0.02)	-0.00 (-0.02 - 0.02)
Gender (M > F)	-0.27 (-0.50 - 0.04)	-0.27 (-0.50 - 0.05)	-0.27 (-0.50 - 0.04)	-0.26 (-0.49 - 0.04)	-0.26 (-0.49 - 0.04)	-0.27 (-0.49 - 0.05)	-0.27 (-0.49 - 0.04)	-0.27 (-0.49 - 0.05)
Timepoint (U > BL)	0.07 (-0.04 - 0.18)	0.07 (-0.04 - 0.19)	0.07 (-0.05 - 0.18)	0.07 (-0.05 - 0.19)	0.07 (-0.04 - 0.18)	0.07 (-0.04 - 0.19)	0.07 (-0.04 - 0.18)	0.07 (-0.04 - 0.18)
Intervention (Fiber > Placebo)	0.04 (-0.08 - 0.15)	0.04 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)	0.04 (-0.07 - 0.15)
Category (F > NF) * nQA(UF)	-3.06 (-7.04 - 0.89)	-3.02 (-7.20 - 0.95)	-3.16 (-7.23 - 0.83)				-3.01 (-6.89 - 1.05)	
Subjective Hunger Level * nQA(UF)	0.51 (-1.14 - 2.17)	0.56 (-1.04 - 2.16)		0.42 (-1.22 - 2.02)		0.48 (-1.13 - 2.11)		
Wanting Category (neutral > unwanted) * nQA(UF)	3.97 (-0.48 - 8.39)		4.05 (-0.64 - 8.55)	3.85 (-0.58 - 8.32)	3.88 (-0.57 - 8.36)			
Wanting Category (wanted > unwanted) * nQA(UF)	1.81 (-2.99 - 6.65)		2.00 (-2.91 - 7.06)	1.80 (-3.12 - 6.65)	1.80 (-3.20 - 6.69)			
Timepoint * Intervention	-0.03 (-0.19 - 0.13)	-0.03 (-0.20 - 0.13)	-0.04 (-0.20 - 0.12)	-0.04 (-0.20 - 0.13)	-0.04 (-0.21 - 0.12)	-0.04 (-0.20 - 0.13)	-0.04 (-0.20 - 0.12)	-0.04 (-0.20 - 0.12)
Random Effects								
σ^2	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
τ_{00}	0.03 Set	0.02 Set	0.02 Set	0.02 Set	0.02 Set	0.02 Set	0.02 Set	0.03 Set
τ_{11}	0.06 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject
	0.29 Set, CategoryF	0.26 Set, CategoryF	0.30 Set, CategoryF	0.26 Set, CategoryF	0.27 Set, CategoryF	0.30 Set, CategoryF	0.28 Set, CategoryF	0.32 Set, CategoryF
	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF
	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total
	0.03 Subject, Wanting_catneutral	0.03 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.03 Subject, Wanting_catneutral	0.03 Subject, Wanting_catneutral	0.03 Subject, Wanting_catneutral
	0.06 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted
	1.05 Subject, nQA_UF_mean	0.77 Subject, nQA_UF_mean	0.77 Subject, nQA_UF_mean	0.77 Subject, nQA_UF_mean	0.83 Subject, nQA_UF_mean	0.83 Subject, nQA_UF_mean	0.71 Subject, nQA_UF_mean	0.75 Subject, nQA_UF_mean
	0.30 Subject, CategoryF*nQA_UF_mean	0.29 Subject, CategoryF*nQA_UF_mean	0.30 Subject, CategoryF*nQA_UF_mean	0.30 Subject, CategoryF*nQA_UF_mean	0.28 Subject, CategoryF*nQA_UF_mean	0.28 Subject, CategoryF*nQA_UF_mean	0.31 Subject, CategoryF*nQA_UF_mean	0.28 Subject, CategoryF*nQA_UF_mean
	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean
	0.30 Subject, Wanting_catneutral*nQA_UF_mean	0.29 Subject, Wanting_catneutral*nQA_UF_mean	0.28 Subject, Wanting_catneutral*nQA_UF_mean	0.28 Subject, Wanting_catneutral*nQA_UF_mean	0.29 Subject, Wanting_catneutral*nQA_UF_mean	0.29 Subject, Wanting_catneutral*nQA_UF_mean	0.30 Subject, Wanting_catneutral*nQA_UF_mean	0.30 Subject, Wanting_catneutral*nQA_UF_mean
	0.59 Subject, Wanting_catwanted*nQA_UF_mean	0.62 Subject, Wanting_catwanted*nQA_UF_mean	0.61 Subject, Wanting_catwanted*nQA_UF_mean	0.61 Subject, Wanting_catwanted*nQA_UF_mean	0.61 Subject, Wanting_catwanted*nQA_UF_mean	0.59 Subject, Wanting_catwanted*nQA_UF_mean	0.63 Subject, Wanting_catwanted*nQA_UF_mean	0.59 Subject, Wanting_catwanted*nQA_UF_mean
ρ_{01}								
ρ_{10}	0.46	0.43	0.46	0.44	0.44	0.44	0.44	0.45
ICC	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
N	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	1022	1022	1022	1022	1022	1022	1022	1022
Marginal R ² / Conditional R ²	0.217 / 0.423	0.213 / 0.430	0.217 / 0.431	0.215 / 0.430	0.215 / 0.429	0.208 / 0.428	0.210 / 0.429	0.210 / 0.428

Table 10-1-2: Null (7-14) BLRMs for the effect of microstructural coherence of the UF on d'.

Predictors for d'	null model 7	null model 8	null model 9	null model 10	null model 11	null model 12	null model 13	null model 14
	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates
Intercept	1.13 (0.11 – 2.15)	1.29 (0.73 – 1.82)	1.11 (0.08 – 2.12)	1.09 (0.11 – 2.11)	1.10 (0.08 – 2.10)	1.27 (0.71 – 1.83)	1.25 (0.75 – 1.75)	1.23 (0.73 – 1.73)
Category (F > NF)	0.67 (0.06 – 1.16)	0.68 (0.14 – 1.15)	0.68 (0.18 – 1.32)	0.67 (0.16 – 1.15)	0.67 (0.16 – 1.26)	0.67 (0.14 – 1.25)	0.67 (0.17 – 1.20)	0.67 (0.16 – 1.17)
Subjective Hunger Level	-0.01 (-0.05 – 0.04)	-0.01 (-0.05 – 0.04)	-0.01 (-0.05 – 0.04)			-0.01 (-0.05 – 0.04)		
Wanting Category (neutral > unwanted)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)		0.04 (-0.07 – 0.15)			0.04 (-0.06 – 0.15)	
Wanting Category (wanted > unwanted)	-0.10 (-0.22 – 0.02)	-0.10 (-0.22 – 0.02)		-0.10 (-0.23 – 0.02)			-0.10 (-0.22 – 0.01)	
nQA(UF)	0.53 (-2.51 – 3.43)		0.53 (-2.30 – 3.46)	0.56 (-2.45 – 3.56)	0.50 (-2.52 – 3.49)			
Age	-0.00 (-0.02 – 0.02)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.02)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)
Gender (M > F)	-0.27 (-0.49 – -0.05)	-0.27 (-0.49 – -0.04)	-0.27 (-0.51 – -0.04)	-0.27 (-0.49 – -0.04)	-0.27 (-0.50 – -0.04)	-0.26 (-0.48 – -0.04)	-0.26 (-0.49 – -0.05)	-0.26 (-0.48 – -0.04)
Timepoint (FU > BL)	0.07 (-0.04 – 0.18)	0.07 (-0.04 – 0.18)	0.07 (-0.04 – 0.18)	0.07 (-0.04 – 0.19)	0.07 (-0.05 – 0.18)	0.07 (-0.05 – 0.18)	0.07 (-0.04 – 0.18)	0.07 (-0.05 – 0.18)
Intervention (Fiber > Placebo)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.14)	0.04 (-0.07 – 0.15)	0.04 (-0.08 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.08 – 0.15)
Timepoint * Intervention	-0.04 (-0.20 – 0.12)	-0.04 (-0.20 – 0.13)	-0.04 (-0.20 – 0.12)	-0.03 (-0.20 – 0.13)	-0.04 (-0.20 – 0.12)	-0.04 (-0.20 – 0.13)	-0.04 (-0.19 – 0.12)	-0.03 (-0.19 – 0.13)
Random Effects								
σ^2	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
τ_{00}	0.03 Set	0.02 Set	0.02 Set	0.02 Set	0.02 Set	0.04 Set	0.02 Set	0.02 Set
	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject
τ_{11}	0.32 Set:CategoryF	0.27 Set:CategoryF	0.35 Set:CategoryF	0.26 Set:CategoryF	0.32 Set:CategoryF	0.35 Set:CategoryF	0.27 Set:CategoryF	0.29 Set:CategoryF
	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF
	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total
	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral	0.03 Subject:Wanting_catneutral
	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted
	0.75 Subject:nQA_UF_mean	0.79 Subject:nQA_UF_mean	0.77 Subject:nQA_UF_mean	0.79 Subject:nQA_UF_mean	0.73 Subject:nQA_UF_mean	0.77 Subject:nQA_UF_mean	0.72 Subject:nQA_UF_mean	0.73 Subject:nQA_UF_mean
	0.29 Subject:CategoryF:nQA_UF_mean	0.29 Subject:CategoryF:nQA_UF_mean	0.27 Subject:CategoryF:nQA_UF_mean	0.27 Subject:CategoryF:nQA_UF_mean	0.29 Subject:CategoryF:nQA_UF_mean	0.30 Subject:CategoryF:nQA_UF_mean	0.28 Subject:CategoryF:nQA_UF_mean	0.27 Subject:CategoryF:nQA_UF_mean
	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean	0.01 Subject:hunger_mean_total:nQA_UF_mean
	0.30 Subject:Wanting_catneutral:nQA_UF_mean	0.30 Subject:Wanting_catneutral:nQA_UF_mean	0.30 Subject:Wanting_catneutral:nQA_UF_mean	0.30 Subject:Wanting_catneutral:nQA_UF_mean	0.33 Subject:Wanting_catneutral:nQA_UF_mean	0.34 Subject:Wanting_catneutral:nQA_UF_mean	0.29 Subject:Wanting_catneutral:nQA_UF_mean	0.34 Subject:Wanting_catneutral:nQA_UF_mean
	0.59 Subject:Wanting_catwanted:nQA_UF_mean	0.60 Subject:Wanting_catwanted:nQA_UF_mean	0.67 Subject:Wanting_catwanted:nQA_UF_mean	0.56 Subject:Wanting_catwanted:nQA_UF_mean	0.68 Subject:Wanting_catwanted:nQA_UF_mean	0.67 Subject:Wanting_catwanted:nQA_UF_mean	0.59 Subject:Wanting_catwanted:nQA_UF_mean	0.68 Subject:Wanting_catwanted:nQA_UF_mean
ρ_{01}								
ρ_{11}								
ICC	0.45	0.39	0.44	0.41	0.42	0.42	0.38	0.36
N	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	1022	1022	1022	1022	1022	1022	1022	1022
Marginal R ² / Conditional R ²	0.210 / 0.428	0.210 / 0.427	0.208 / 0.426	0.208 / 0.427	0.205 / 0.426	0.203 / 0.426	0.209 / 0.427	0.204 / 0.426

Table 10-2-1: Full and null (1-7) BLRMs for the effect of microstructural coherence of the UF on LDI.

Predictors for LDI	full model	null model 1	null model 2	null model 3	null model 4	null model 5	null model 6	null model 7
	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates
Intercept	1.14 (-1.25 – 3.68)	0.93 (-1.53 – 3.42)	0.74 (-0.64 – 2.18)	1.37 (-1.00 – 3.74)	1.05 (-0.21 – 2.35)	1.14 (-1.19 – 3.50)	0.50 (-0.73 – 1.72)	0.80 (-0.28 – 1.90)
Category (F > NF)	1.33 (0.09 – 2.64)	1.35 (0.08 – 2.66)	1.34 (0.04 – 2.70)	0.74 (0.23 – 1.25)	0.73 (0.08 – 1.24)	0.73 (0.13 – 1.24)	1.33 (0.08 – 2.60)	0.73 (0.17 – 1.30)
Subjective Hunger Level	-0.08 (-0.54 – -0.36)	-0.10 (-0.56 – -0.37)	-0.00 (-0.05 – -0.05)	-0.07 (-0.53 – -0.37)	-0.00 (-0.05 – -0.05)	-0.00 (-0.54 – -0.37)	-0.00 (-0.05 – -0.05)	-0.00 (-0.05 – -0.05)
Wanting Category (neutral > unwanted)	-0.76 (-1.96 – -0.55)	0.05 (-0.07 – -0.16)	-0.76 (-2.03 – -0.55)	-0.75 (-2.04 – -0.52)	-0.74 (-2.03 – -0.51)	-0.74 (-2.03 – -0.51)	0.05 (-0.07 – -0.16)	0.05 (-0.06 – -0.16)
Wanting Category (wanted > unwanted)	-0.00 (-1.35 – -1.37)	-0.01 (-0.14 – -0.12)	-0.02 (-1.43 – -1.39)	0.01 (-1.39 – -1.41)	0.01 (-1.39 – -1.44)	-0.01 (-0.15 – -0.12)	-0.01 (-0.14 – -0.12)	-0.01 (-0.14 – -0.12)
nQA(UF)	-0.27 (-9.40 – -8.49)	0.40 (-8.76 – 9.57)	1.18 (-3.43 – 5.80)	-1.13 (-9.89 – -7.60)	0.10 (-4.00 – 4.07)	-0.32 (-9.07 – 8.15)	2.05 (-1.71 – 6.04)	1.03 (-2.25 – 4.24)
Age	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)	-0.01 (-0.02 – -0.01)
Gender (M > F)	-0.31 (-0.53 – -0.07)	-0.30 (-0.53 – -0.07)	-0.30 (-0.54 – -0.07)	-0.30 (-0.53 – -0.06)	-0.30 (-0.53 – -0.07)	-0.31 (-0.54 – -0.08)	-0.30 (-0.52 – -0.07)	-0.30 (-0.53 – -0.08)
Timepoint (U > BL)	0.07 (-0.06 – -0.20)	0.07 (-0.05 – -0.19)	0.07 (-0.06 – -0.19)	0.07 (-0.05 – -0.20)	0.07 (-0.05 – -0.19)	0.07 (-0.05 – -0.20)	0.07 (-0.05 – -0.20)	0.07 (-0.06 – -0.19)
Intervention (Fiber > Placebo)	0.06 (-0.06 – -0.18)	0.06 (-0.06 – -0.17)	0.06 (-0.07 – -0.18)	0.06 (-0.06 – -0.18)	0.06 (-0.06 – -0.18)	0.06 (-0.07 – -0.18)	0.06 (-0.06 – -0.18)	0.06 (-0.06 – -0.18)
Category (F > NF) * nQA(UF)	-2.21 (-6.54 – -2.07)	-2.26 (-6.74 – -2.03)	-2.24 (-6.83 – -1.99)				2.20 (-6.53 – 2.09)	
Subjective Hunger Level * nQA(UF)	0.29 (-1.39 – -2.04)	0.36 (-1.42 – -2.14)		0.25 (-1.42 – -2.01)			0.30 (-1.41 – -2.03)	
Wanting Category (neutral > unwanted) * nQA(UF)	2.97 (-1.82 – -7.42)		2.97 (-1.86 – -7.66)	2.96 (-1.77 – -7.72)	2.94 (-1.74 – -7.60)			
Wanting Category (wanted > unwanted) * nQA(UF)	-0.04 (-5.09 – -4.93)		-0.01 (-5.09 – -5.20)	-0.11 (-5.23 – -5.09)	-0.12 (-5.38 – -5.10)			
Timepoint * Intervention	-0.01 (-0.19 – -0.18)	-0.01 (-0.18 – -0.17)	-0.01 (-0.19 – -0.17)	-0.01 (-0.18 – -0.17)	-0.01 (-0.19 – -0.17)	-0.01 (-0.19 – -0.17)	-0.02 (-0.19 – -0.16)	-0.01 (-0.19 – -0.16)
Random Effects								
c2	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
T00	0.02 Set	0.02 Set	0.02 Set	0.03 Set	0.02 Set	0.02 Set	0.02 Set	0.02 Set
	0.07 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.05 Subject	0.06 Subject	0.06 Subject	0.06 Subject
T11	0.35 Set, CategoryF	0.29 Set, CategoryF	0.36 Set, CategoryF	0.32 Set, CategoryF	0.34 Set, CategoryF	0.32 Set, CategoryF	0.30 Set, CategoryF	0.33 Set, CategoryF
	0.04 Subject, CategoryF	0.04 Subject, CategoryF	0.04 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.03 Subject, CategoryF	0.04 Subject, CategoryF	0.03 Subject, CategoryF
	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total	0.00 Subject, hunger_mean_total
	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral	0.02 Subject, Wanting_catneutral
	0.07 Subject, Wanting_catwanted	0.05 Subject, Wanting_catwanted	0.04 Subject, Wanting_catwanted	0.05 Subject, Wanting_catwanted	0.05 Subject, Wanting_catwanted	0.05 Subject, Wanting_catwanted	0.05 Subject, Wanting_catwanted	0.05 Subject, Wanting_catwanted
	1.00 Subject, nQA_UF_mean	0.91 Subject, nQA_UF_mean	0.81 Subject, nQA_UF_mean	0.86 Subject, nQA_UF_mean	0.81 Subject, nQA_UF_mean	0.80 Subject, nQA_UF_mean	0.78 Subject, nQA_UF_mean	0.78 Subject, nQA_UF_mean
	0.34 Subject, CategoryF*nQA_UF_mean	0.33 Subject, CategoryF*nQA_UF_mean	0.31 Subject, CategoryF*nQA_UF_mean	0.34 Subject, CategoryF*nQA_UF_mean	0.31 Subject, CategoryF*nQA_UF_mean	0.34 Subject, CategoryF*nQA_UF_mean	0.33 Subject, CategoryF*nQA_UF_mean	0.33 Subject, CategoryF*nQA_UF_mean
	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean	0.01 Subject, hunger_mean_total*nQA_UF_mean
	0.23 Subject, Wanting_catneutral*nQA_UF_mean	0.23 Subject, Wanting_catneutral*nQA_UF_mean	0.22 Subject, Wanting_catneutral*nQA_UF_mean	0.23 Subject, Wanting_catneutral*nQA_UF_mean	0.23 Subject, Wanting_catneutral*nQA_UF_mean	0.23 Subject, Wanting_catneutral*nQA_UF_mean	0.23 Subject, Wanting_catneutral*nQA_UF_mean	0.23 Subject, Wanting_catneutral*nQA_UF_mean
	0.71 Subject, Wanting_catwanted*nQA_UF_mean	0.76 Subject, Wanting_catwanted*nQA_UF_mean	0.71 Subject, Wanting_catwanted*nQA_UF_mean	0.71 Subject, Wanting_catwanted*nQA_UF_mean	0.71 Subject, Wanting_catwanted*nQA_UF_mean	0.68 Subject, Wanting_catwanted*nQA_UF_mean	0.67 Subject, Wanting_catwanted*nQA_UF_mean	0.70 Subject, Wanting_catwanted*nQA_UF_mean
R01								
ICC	0.43	0.40	0.44	0.43	0.43	0.42	0.40	0.41
N	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
Observations	1011	1011	1011	1011	1011	1011	1011	1011
Marginal R2 / Conditional R2	0.225 / 0.412	0.220 / 0.419	0.224 / 0.420	0.222 / 0.418	0.220 / 0.418	0.218 / 0.417	0.220 / 0.417	0.219 / 0.417

Table 10-2-2: Null (7-14) BLRMs for the effect of microstructural coherence of the UF on LDI.

Predictors for LDI	null model 7	null model 8	null model 9	null model 10	null model 11	null model 12	null model 13	null model 14
	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates
Intercept	0.80 (-0.28 – 1.90)	1.08 (0.52 – 1.63)	0.81 (-0.31 – 1.88)	0.78 (-0.31 – 1.84)	0.78 (-0.27 – 1.85)	1.09 (0.53 – 1.65)	1.06 (0.57 – 1.57)	1.08 (0.53 – 1.57)
Category (F > NF)	0.73 (0.17 – 1.30)	0.73 (0.19 – 1.29)	0.74 (0.22 – 1.27)	0.73 (0.19 – 1.32)	0.74 (0.11 – 1.26)	0.73 (0.19 – 1.23)	0.73 (0.21 – 1.26)	0.73 (0.15 – 1.25)
Subjective Hunger Level	-0.00 (-0.05 – 0.05)	-0.00 (-0.05 – 0.05)	-0.00 (-0.05 – 0.05)			-0.00 (-0.05 – 0.04)		
Wanting Category (neutral > unwanted)	0.05 (-0.06 – 0.16)	0.05 (-0.07 – 0.16)		0.05 (-0.06 – 0.16)			0.05 (-0.06 – 0.16)	
Wanting Category (wanted > unwanted)	-0.01 (-0.14 – 0.12)	-0.01 (-0.15 – 0.12)		-0.01 (-0.14 – 0.12)			-0.01 (-0.14 – 0.12)	
nQA(UF)	1.03 (-2.25 – 4.24)		1.01 (-2.24 – 4.33)	1.03 (-2.17 – 4.20)	1.01 (-2.23 – 4.18)			
Age	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)
Gender (M > F)	-0.30 (-0.53 – -0.08)	-0.29 (-0.52 – -0.07)	-0.30 (-0.53 – -0.07)	-0.30 (-0.53 – -0.08)	-0.30 (-0.53 – -0.07)	-0.29 (-0.53 – -0.06)	-0.29 (-0.51 – -0.07)	-0.29 (-0.51 – -0.06)
Timepoint (FU > BL)	0.07 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)	0.07 (-0.06 – 0.20)	0.07 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)	0.07 (-0.06 – 0.20)	0.07 (-0.06 – 0.19)
Intervention (Fiber > Placebo)	0.06 (-0.06 – 0.18)	0.05 (-0.07 – 0.18)	0.06 (-0.06 – 0.18)	0.06 (-0.06 – 0.18)	0.05 (-0.07 – 0.17)	0.05 (-0.07 – 0.17)	0.05 (-0.07 – 0.17)	0.05 (-0.07 – 0.17)
Timepoint * Intervention	-0.01 (-0.19 – 0.16)	-0.01 (-0.18 – 0.17)	-0.01 (-0.19 – 0.16)	-0.01 (-0.18 – 0.16)	-0.01 (-0.18 – 0.17)	-0.00 (-0.18 – 0.17)	-0.00 (-0.18 – 0.17)	-0.01 (-0.17 – 0.17)
Random Effects								
σ^2	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
τ_{00}	0.02 Set	0.02 Set	0.03 Set	0.03 Set	0.02 Set	0.02 Set	0.02 Set	0.02 Set
	0.06 Subject	0.06 Subject	0.09 Subject	0.06 Subject	0.05 Subject	0.06 Subject	0.05 Subject	0.05 Subject
τ_{11}	0.33 Set:CategoryF	0.31 Set:CategoryF	0.32 Set:CategoryF	0.34 Set:CategoryF	0.33 Set:CategoryF	0.30 Set:CategoryF	0.31 Set:CategoryF	0.31 Set:CategoryF
	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF
	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total	0.00 Subject:hunger_mean_total
	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral	0.02 Subject:Wanting_catneutral
	0.05 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.05 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted	0.05 Subject:Wanting_catwanted	0.04 Subject:Wanting_catwanted
	0.78 Subject:nQA_UF_mean	0.82 Subject:nQA_UF_mean	0.78 Subject:nQA_UF_mean	0.76 Subject:nQA_UF_mean	0.79 Subject:nQA_UF_mean	0.78 Subject:nQA_UF_mean	0.80 Subject:nQA_UF_mean	0.79 Subject:nQA_UF_mean
	0.33 Subject:CategoryF:nQA_UF_mean	0.33 Subject:CategoryF:nQA_UF_mean	0.33 Subject:CategoryF:nQA_UF_mean	0.31 Subject:CategoryF:nQA_UF_mean	0.33 Subject:CategoryF:nQA_UF_mean	0.30 Subject:CategoryF:nQA_UF_mean	0.34 Subject:CategoryF:nQA_UF_mean	0.33 Subject:CategoryF:nQA_UF_mean
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean	Subject:hunger_mean_total:nQA_UF_mean
	0.23	0.22	0.24	0.23	0.25	0.24	0.23	0.25
	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean	Subject:Wanting_catneutral:nQA_UF_mean
	0.70	0.71	0.67	0.68	0.66	0.65	0.69	0.68
	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean	Subject:Wanting_catwanted:nQA_UF_mean
ρ_{01}								
ρ_{11}								
ICC	0.41	0.37	0.39	0.41	0.39	0.35	0.36	0.34
N	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	1011	1011	1011	1011	1011	1011	1011	1011
Marginal R ² / Conditional R ²	0.219 / 0.417	0.218 / 0.417	0.218 / 0.415	0.217 / 0.416	0.218 / 0.415	0.214 / 0.415	0.216 / 0.416	0.213 / 0.415

Table 10-3-2: Null (7-14) BLRMs for the effect of microstructural coherence of the sub-bundle of the UF on d'.

Predictors for <i>d'</i>	null model 7	null model 8	null model 9	null model 10	null model 11	null model 12	null model 13	null model 14
	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates	Estimates
Intercept	1.19 (0.42 – 1.98)	1.30 (0.77 – 1.84)	1.19 (0.40 – 1.98)	1.16 (0.40 – 1.89)	1.15 (0.41 – 1.90)	1.30 (0.74 – 1.82)	1.27 (0.77 – 1.78)	1.26 (0.76 – 1.75)
Category (F > NF)	0.67 (0.16 – 1.13)	0.67 (0.18 – 1.27)	0.67 (0.11 – 1.18)	0.67 (0.17 – 1.21)	0.68 (0.19 – 1.20)	0.67 (0.15 – 1.18)	0.67 (0.16 – 1.22)	0.67 (0.14 – 1.26)
Subjective Hunger Level	-0.01 (-0.05 – 0.04)	-0.01 (-0.05 – 0.04)	-0.01 (-0.05 – 0.04)			-0.01 (-0.06 – 0.04)		
Wanting Category (neutral > unwanted)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)		0.04 (-0.07 – 0.15)			0.04 (-0.07 – 0.15)	
Wanting Category (wanted > unwanted)	-0.10 (-0.22 – 0.01)	-0.10 (-0.22 – 0.02)		-0.10 (-0.22 – 0.02)			-0.10 (-0.23 – 0.01)	
rDA(sub-UF)	0.50 (2.31 – 3.31)		0.48 (2.34 – 3.29)	0.52 (2.33 – 3.43)	0.50 (2.26 – 3.27)			
Gender (M > F)	-0.25 (-0.47 – -0.03)	-0.25 (-0.47 – -0.03)	-0.25 (-0.47 – -0.03)	-0.25 (-0.47 – -0.03)	-0.25 (-0.47 – -0.03)	-0.25 (-0.46 – -0.03)	-0.26 (-0.48 – -0.03)	-0.25 (-0.47 – -0.02)
Age	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)	-0.00 (-0.02 – 0.01)
Timepoint (FU > BL)	0.07 (-0.05 – 0.18)	0.07 (-0.05 – 0.19)	0.07 (-0.04 – 0.19)	0.07 (-0.04 – 0.18)	0.07 (-0.05 – 0.18)	0.07 (-0.05 – 0.18)	0.07 (-0.05 – 0.18)	0.07 (-0.04 – 0.18)
Intervention (Fiber > Placebo)	0.04 (-0.07 – 0.15)	0.04 (-0.08 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.15)	0.04 (-0.07 – 0.14)
Timepoint * Intervention	-0.04 (-0.20 – 0.12)	-0.04 (-0.20 – 0.13)	-0.04 (-0.20 – 0.12)	-0.04 (-0.20 – 0.12)	-0.04 (-0.19 – 0.12)	-0.04 (-0.20 – 0.13)	-0.03 (-0.20 – 0.12)	-0.03 (-0.19 – 0.13)
Random Effects								
σ^2	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
τ_{00}	0.02 Set	0.02 Set	0.04 Set	0.03 Set	0.02 Set	0.02 Set	0.03 Set	0.02 Set
	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject
τ_{11}	0.27 Set CategoryF	0.39 Set CategoryF	0.30 Set CategoryF	0.30 Set CategoryF	0.31 Set CategoryF	0.27 Set CategoryF	0.29 Set CategoryF	0.30 Set CategoryF
	0.02 Subject CategoryF	0.09 Subject CategoryF	0.02 Subject CategoryF	0.02 Subject CategoryF	0.02 Subject CategoryF	0.02 Subject CategoryF	0.02 Subject CategoryF	0.02 Subject CategoryF
	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total	0.00 Subject_hunger_mean_total
	0.02 Subject_Wanting_cateutral	0.02 Subject_Wanting_cateutral	0.03 Subject_Wanting_cateutral	0.02 Subject_Wanting_cateutral	0.03 Subject_Wanting_cateutral	0.03 Subject_Wanting_cateutral	0.03 Subject_Wanting_cateutral	0.03 Subject_Wanting_cateutral
	0.04 Subject_Wanting_catewanted	0.05 Subject_Wanting_catewanted	0.05 Subject_Wanting_catewanted	0.05 Subject_Wanting_catewanted	0.05 Subject_Wanting_catewanted	0.05 Subject_Wanting_catewanted	0.04 Subject_Wanting_catewanted	0.05 Subject_Wanting_catewanted
	1.81 Subject_rDA_sub_UF_mean	1.78 Subject_rDA_sub_UF_mean	1.83 Subject_rDA_sub_UF_mean	1.82 Subject_rDA_sub_UF_mean	1.86 Subject_rDA_sub_UF_mean	1.90 Subject_rDA_sub_UF_mean	1.82 Subject_rDA_sub_UF_mean	1.81 Subject_rDA_sub_UF_mean
	0.74 Subject_CategoryF_rDA_sub_UF_mean	0.71 Subject_CategoryF_rDA_sub_UF_mean	0.68 Subject_CategoryF_rDA_sub_UF_mean	0.68 Subject_CategoryF_rDA_sub_UF_mean	0.71 Subject_CategoryF_rDA_sub_UF_mean	0.70 Subject_CategoryF_rDA_sub_UF_mean	0.69 Subject_CategoryF_rDA_sub_UF_mean	0.69 Subject_CategoryF_rDA_sub_UF_mean
	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean	0.03 Subject_hunger_mean_total_rDA_sub_UF_mean
	0.69 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.68 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.73 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.67 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.76 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.77 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.68 Subject_Wanting_cateutral_rDA_sub_UF_mean	0.75 Subject_Wanting_cateutral_rDA_sub_UF_mean
	1.04 Subject_Wanting_catewanted_rDA_sub_UF_mean	0.99 Subject_Wanting_catewanted_rDA_sub_UF_mean	1.05 Subject_Wanting_catewanted_rDA_sub_UF_mean	0.98 Subject_Wanting_catewanted_rDA_sub_UF_mean	1.14 Subject_Wanting_catewanted_rDA_sub_UF_mean	1.07 Subject_Wanting_catewanted_rDA_sub_UF_mean	1.07 Subject_Wanting_catewanted_rDA_sub_UF_mean	1.10 Subject_Wanting_catewanted_rDA_sub_UF_mean
P01								
ICC	0.42	0.41	0.43	0.44	0.41	0.36	0.38	0.36
N	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	1022	1022	1022	1022	1022	1022	1022	1022
Marginal R ² / Conditional R ²	0.209 / 0.426	0.208 / 0.426	0.202 / 0.425	0.209 / 0.426	0.205 / 0.425	0.201 / 0.425	0.206 / 0.427	0.202 / 0.425

Table 10-4-2: Null (7-14) BLRMs for the effect of microstructural coherence of the sub-bundle of the UF on LDI.

Predictors for LDI	null model 7	null model 8	null model 9	null model 10	null model 11	null model 12	null model 13	null model 14
Intercept	0.98 (0.18 – 1.81)	1.08 (0.52 – 1.65)	0.98 (0.18 – 1.79)	0.96 (0.13 – 1.72)	0.97 (0.21 – 1.75)	1.09 (0.53 – 1.65)	1.07 (0.54 – 1.56)	1.07 (0.54 – 1.57)
Category (F > M)	0.74 (0.20 – 1.28)	0.73 (0.11 – 1.26)	0.74 (0.25 – 1.28)	0.74 (0.18 – 1.29)	0.73 (0.17 – 1.31)	0.74 (0.27 – 1.27)	0.73 (0.22 – 1.23)	0.73 (0.14 – 1.25)
Subjective Hunger Level	-0.01 (-0.05 – 0.04)	-0.00 (-0.05 – 0.04)	-0.00 (-0.05 – 0.04)					
Wanting Category (neutral > unwanted)	0.05 (-0.07 – 0.16)	0.05 (-0.06 – 0.16)		0.05 (-0.06 – 0.15)			0.05 (-0.06 – 0.16)	
Wanting Category (wanted > unwanted)	-0.01 (-0.14 – 0.12)	-0.01 (-0.14 – 0.12)		-0.01 (-0.14 – 0.12)			-0.01 (-0.14 – 0.12)	
nQA(sub-UF)	0.51 (2.44 – 3.53)		0.53 (2.43 – 3.53)	0.54 (2.48 – 3.57)	0.53 (2.50 – 3.49)			
Gender (M > F)	-0.28 (-0.51 – -0.05)	-0.28 (-0.51 – -0.06)	-0.28 (-0.51 – -0.05)	-0.28 (-0.51 – -0.06)	-0.28 (-0.51 – -0.05)	-0.28 (-0.50 – -0.05)	-0.28 (-0.50 – -0.06)	-0.28 (-0.50 – -0.05)
Age	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.01)
Timepoint (FU > BL)	0.07 (-0.06 – 0.19)	0.06 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)	0.06 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)	0.06 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)	0.07 (-0.06 – 0.19)
Intervention (Fiber > Placebo)	0.06 (-0.06 – 0.18)	0.05 (-0.06 – 0.18)	0.06 (-0.06 – 0.18)	0.05 (-0.07 – 0.17)	0.05 (-0.06 – 0.17)	0.05 (-0.07 – 0.17)	0.05 (-0.07 – 0.17)	0.05 (-0.06 – 0.17)
Timepoint * Intervention	-0.01 (-0.18 – 0.16)	-0.00 (-0.18 – 0.17)	-0.01 (-0.18 – 0.17)	-0.00 (-0.18 – 0.17)	-0.01 (-0.17 – 0.16)	-0.00 (-0.18 – 0.17)	-0.00 (-0.18 – 0.17)	-0.00 (-0.18 – 0.17)
Random Effects								
σ^2	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
τ_{00}	0.02 Set	0.02 Set	0.02 Set	0.03 Set	0.02 Set	0.02 Set	0.02 Set	0.03 Set
τ_{11}	0.04 Subject	0.04 Subject	0.05 Subject	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject	0.04 Subject
	0.31 Set:CategoryF	0.34 Set:CategoryF	0.42 Set:CategoryF	0.33 Set:CategoryF	0.29 Set:CategoryF	0.30 Set:CategoryF	0.29 Set:CategoryF	0.31 Set:CategoryF
	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF	0.03 Subject:CategoryF
	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total	0.02 Subject:hunger_mean_total
	0.05 Subject:Wanting_categorized	0.05 Subject:Wanting_categorized	0.05 Subject:Wanting_categorized	0.05 Subject:Wanting_categorized	0.04 Subject:Wanting_categorized	0.04 Subject:Wanting_categorized	0.04 Subject:Wanting_categorized	0.04 Subject:Wanting_categorized
	2.23 Subject:nQA_sub_UF_mean	2.17 Subject:nQA_sub_UF_mean	2.06 Subject:nQA_sub_UF_mean	2.02 Subject:nQA_sub_UF_mean	2.10 Subject:nQA_sub_UF_mean	2.08 Subject:nQA_sub_UF_mean	2.16 Subject:nQA_sub_UF_mean	2.18 Subject:nQA_sub_UF_mean
	0.81 Subject:CategoryF*nQA_sub_UF_mean	0.79 Subject:CategoryF*nQA_sub_UF_mean	0.82 Subject:CategoryF*nQA_sub_UF_mean	0.83 Subject:CategoryF*nQA_sub_UF_mean	0.81 Subject:CategoryF*nQA_sub_UF_mean	0.81 Subject:CategoryF*nQA_sub_UF_mean	0.81 Subject:CategoryF*nQA_sub_UF_mean	0.84 Subject:CategoryF*nQA_sub_UF_mean
	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean	0.03 Subject:hunger_mean_total*nQA_sub_UF_mean
	0.50 Subject:Wanting_categorized*nQA_sub_UF_mean	0.50 Subject:Wanting_categorized*nQA_sub_UF_mean	0.51 Subject:Wanting_categorized*nQA_sub_UF_mean	0.50 Subject:Wanting_categorized*nQA_sub_UF_mean	0.53 Subject:Wanting_categorized*nQA_sub_UF_mean	0.50 Subject:Wanting_categorized*nQA_sub_UF_mean	0.50 Subject:Wanting_categorized*nQA_sub_UF_mean	0.50 Subject:Wanting_categorized*nQA_sub_UF_mean
	1.48 Subject:Wanting_categorized*nQA_sub_UF_mean	1.38 Subject:Wanting_categorized*nQA_sub_UF_mean	1.36 Subject:Wanting_categorized*nQA_sub_UF_mean	1.34 Subject:Wanting_categorized*nQA_sub_UF_mean	1.33 Subject:Wanting_categorized*nQA_sub_UF_mean	1.29 Subject:Wanting_categorized*nQA_sub_UF_mean	1.36 Subject:Wanting_categorized*nQA_sub_UF_mean	1.33 Subject:Wanting_categorized*nQA_sub_UF_mean
ρ_{01}								
ρ_{10}								
ICC	0.40	0.36	0.42	0.41	0.36	0.33	0.33	0.33
N	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set	4 Set
Observations	1011	1011	1011	1011	1011	1011	1011	1011
Marginal R ² / Conditional R ²	0.218 / 0.416	0.215 / 0.416	0.216 / 0.415	0.216 / 0.416	0.213 / 0.415	0.215 / 0.415	0.212 / 0.416	0.212 / 0.414

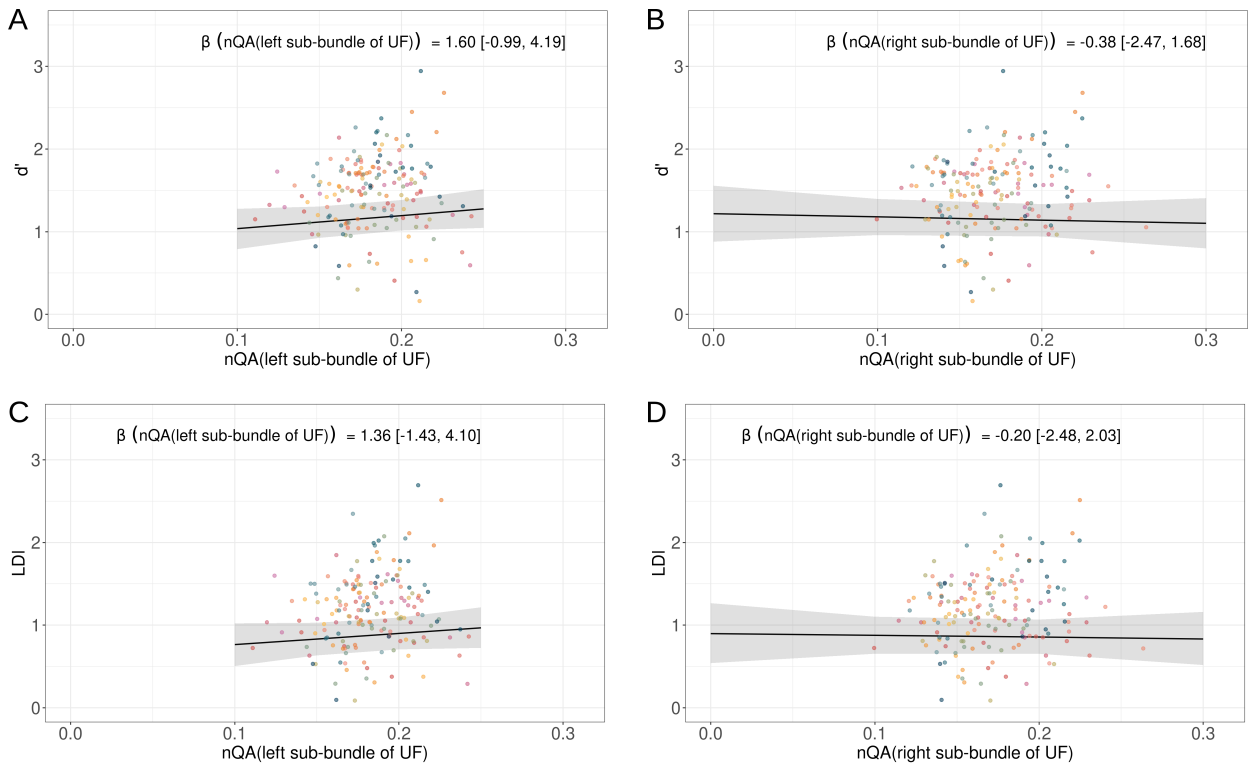


Figure 10-4: Memory performance depending on microstructural coherence of left and right sub-bundle of UF. Actual and predicted A+B) target recognition d' and C+D) lure discrimination LDI depending on normalized quantitative anisotropy (nQA) of the A+C) left and B+D) right sub-bundle of the UF. Points show the actual data and lines with 95%-CI depict predictions based on null models (cf. Table 2, Eq. 27). Neither d' nor LDI were affected by the microstructural coherence of a hemisphere-specific sub-bundle of the UF.

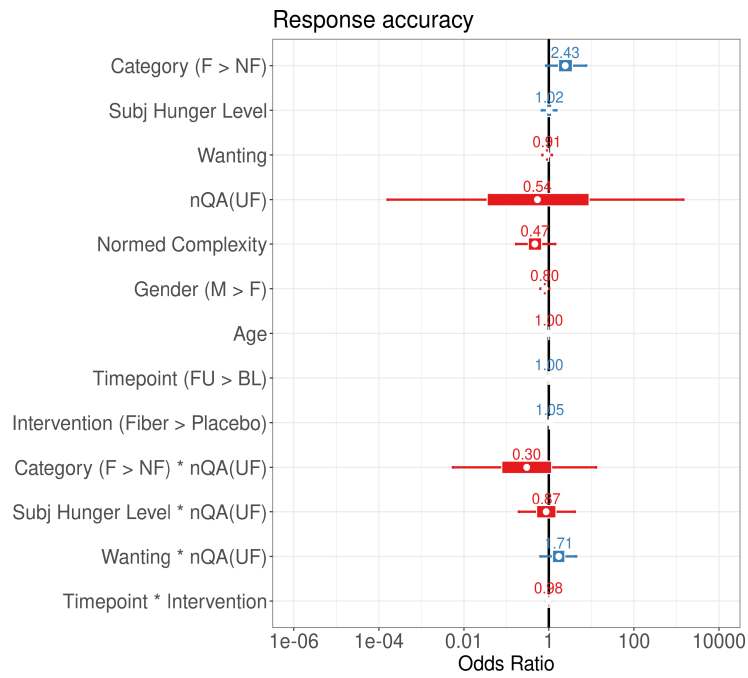


Figure 11-1: Odds ratios of the full model (Table 2, Eq. 31) for the effect of microstructural properties of the UF and covariates on response accuracy. Values indicate the positive (blue) or negative (red) mean estimate of the posterior distribution and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CIs. **The UF neither moderated effects of wanting category nor of subj. hunger level nor of image category on memory accuracy, nor predicted its microstructural coherence memory accuracy. Only the effect of Gender (M<F) on memory accuracy seemed to be evident as its 95% CI did not include Zero.**

Table 11-1: Full and null BLRMs for the moderation effect of the microstructural coherence of the UF on single image wanting regarding response accuracy.

Predictors for response accuracy	full model	null model 1	null model 2	null model 3	null model 4	null model 5	null model 6	null model 7	
	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	
Intercept	5.37 (0.57 – 49.71)	4.09 (0.51 – 32.03)	4.38 (1.47 – 13.11)	4.63 (1.72 – 13.12)	4.55 (2.25 – 9.24)	4.91 (2.44 – 9.82)	4.63 (2.32 – 9.35)	10.79 (5.97 – 19.77)	
Category (F > NF)	2.43 (0.86 – 7.54)	2.15 (0.77 – 5.87)	2.10 (0.77 – 6.07)	1.78 (1.38 – 2.29)	1.78 (1.38 – 2.26)	1.82 (1.43 – 2.36)	1.84 (1.43 – 2.35)		
Subj Hunger Level	1.02 (0.68 – 1.51)	0.99 (0.69 – 1.46)	0.98 (0.94 – 1.03)	0.98 (0.94 – 1.02)	0.98 (0.94 – 1.02)	0.99 (0.95 – 1.03)			
Wanting	0.91 (0.70 – 1.19)	1.05 (1.02 – 1.08)	1.05 (1.02 – 1.08)	1.05 (1.02 – 1.08)	1.05 (1.02 – 1.08)				
nQA(UF)	0.54 (0.00 – 1452.38)	1.41 (0.00 – 2458.08)	1.10 (0.06 – 21.77)	0.90 (0.07 – 13.39)					
Normed Complexity	0.47 (0.17 – 1.42)	0.48 (0.17 – 1.38)	0.47 (0.16 – 1.38)	0.47 (0.16 – 1.38)	0.47 (0.16 – 1.24)	0.47 (0.17 – 1.27)	0.49 (0.16 – 1.35)	0.09 (0.04 – 0.20)	
Gender (M > F)	0.80 (0.63 – 1.02)	0.80 (0.63 – 1.03)	0.80 (0.64 – 1.02)	0.80 (0.64 – 1.02)	0.80 (0.64 – 1.02)	0.81 (0.65 – 1.02)	0.81 (0.64 – 1.03)	0.81 (0.64 – 1.02)	
Age	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	
Timepoint (FU > BL)	1.00 (0.91 – 1.10)	1.00 (0.91 – 1.10)	1.00 (0.92 – 1.10)	1.00 (0.92 – 1.10)	1.00 (0.92 – 1.10)	1.00 (0.91 – 1.10)	1.00 (0.91 – 1.09)	1.00 (0.91 – 1.09)	
Intervention (Fiber > Placebo)	1.05 (0.96 – 1.15)	1.05 (0.96 – 1.15)	1.05 (0.97 – 1.15)	1.05 (0.97 – 1.15)	1.05 (0.96 – 1.15)	1.05 (0.96 – 1.15)	1.05 (0.96 – 1.15)	1.05 (0.96 – 1.14)	
Category (F > NF) * nQA(UF)	0.30 (0.01 – 12.89)	0.52 (0.01 – 18.73)	0.56 (0.01 – 21.40)						
Subj Hunger Level * nQA(UF)	0.87 (0.20 – 4.08)	0.96 (0.22 – 3.95)							
Wanting * nQA(UF)	1.71 (0.64 – 4.41)								
Timepoint * Intervention	0.98 (0.86 – 1.12)	0.99 (0.86 – 1.12)	0.99 (0.86 – 1.12)	0.99 (0.86 – 1.12)	0.99 (0.86 – 1.12)	0.98 (0.86 – 1.12)	0.99 (0.87 – 1.12)	0.99 (0.88 – 1.13)	
Random Effects									
σ^2	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	
T00	1.01 Image 0.07 Subject	1.01 Image 0.07 Subject	1.01 Image 0.07 Subject	1.01 Image 0.07 Subject	1.00 Image 0.07 Subject	1.00 Image 0.07 Subject	1.00 Image 0.08 Subject	1.04 Image 0.08 Subject	
T11	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.97 Subject.nQA_UF_mean	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.78 Subject.nQA_UF_mean	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.70 Subject.nQA_UF_mean	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.76 Subject.nQA_UF_mean	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.73 Subject.nQA_UF_mean	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.85 Subject.nQA_UF_mean	0.06 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.72 Subject.nQA_UF_mean	0.07 Subject.CategoryF 0.00 Subject.hunger_mean_total 0.00 Subject.Wanting 1.90 Subject.nQA_UF_mean	
P01									
ICC	0.27	0.27	0.27	0.27	0.26	0.25	0.25	0.25	
N	55 Subject 640 Image	55 Subject 640 Image	55 Subject 640 Image	55 Subject 640 Image	55 Subject 640 Image	55 Subject 640 Image	55 Subject 640 Image	55 Subject 640 Image	
Observations	27764	27764	27764	27764	27764	27764	27764	27764	
Marginal R ² / Conditional R ²	0.023 / 0.173	0.023 / 0.173	0.023 / 0.173	0.023 / 0.173	0.023 / 0.173	0.021 / 0.173	0.021 / 0.173	0.013 / 0.173	

Table 12-1: Full and null BLRMs for the effect of single image liking ratings of previously encoded (old) images on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for Response Accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	2.43 (1.23 – 4.83)	2.52 (1.32 – 5.02)	3.00 (1.48 – 6.23)
Liking	1.07 (1.02 – 1.13)	1.06 (1.02 – 1.10)	
Category (F > NF)	1.96 (1.38 – 2.79)	1.76 (1.39 – 2.27)	1.90 (1.47 – 2.43)
Normed Complexity	1.05 (0.40 – 2.86)	1.05 (0.40 – 2.75)	1.02 (0.38 – 2.61)
Gender (M > F)	0.90 (0.70 – 1.15)	0.91 (0.70 – 1.15)	0.92 (0.70 – 1.19)
Age	1.00 (0.98 – 1.01)	1.00 (0.98 – 1.01)	0.99 (0.97 – 1.01)
Timepoint (FU > BL)	0.92 (0.80 – 1.06)	0.92 (0.80 – 1.06)	0.92 (0.80 – 1.06)
Intervention (Fiber > Placebo)	1.09 (0.94 – 1.25)	1.09 (0.94 – 1.25)	1.09 (0.95 – 1.26)
Liking * Category (F > NF)	0.97 (0.92 – 1.04)		
Timepoint * Intervention	1.05 (0.86 – 1.29)	1.05 (0.86 – 1.28)	1.05 (0.86 – 1.29)
Random Effects			
σ^2	3.29	3.29	3.29
T ₀₀	0.22 Image	0.22 Image	0.21 Image
	0.07 Subject	0.07 Subject	0.09 Subject
T ₁₁	0.00 Subject.Liking	0.00 Subject.Liking	0.01 Subject.Liking
	0.06 Subject.CategoryF	0.06 Subject.CategoryF	0.07 Subject.CategoryF
	0.00 Subject.Liking:CategoryF	0.00 Subject.Liking:CategoryF	0.00 Subject.Liking:CategoryF
P ₀₁			
P ₀₁			
ICC	0.11	0.11	0.10
N	43 Subject	43 Subject	43 Subject
	240 Image	240 Image	240 Image
Observations	9136	9136	9136
Marginal R ² / Conditional R ²	0.023 / 0.075	0.022 / 0.074	0.020 / 0.074

Table 12-2: Full and null BLRMs for the effect of single image wanting ratings of previously encoded (old) images on response accuracy.

	full model	null model 1	null model 2
<i>Predictors for Response Accuracy</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	2.13 (1.13 – 3.98)	2.21 (1.15 – 4.10)	2.68 (1.41 – 5.15)
Wanting	1.10 (1.05 – 1.15)	1.09 (1.05 – 1.13)	
Category (F > NF)	1.85 (1.38 – 2.55)	1.78 (1.39 – 2.26)	1.81 (1.43 – 2.33)
Normed Complexity	1.08 (0.43 – 2.75)	1.08 (0.42 – 2.80)	1.03 (0.40 – 2.65)
Gender (M > F)	0.87 (0.69 – 1.08)	0.87 (0.69 – 1.09)	0.88 (0.69 – 1.11)
Age	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)	1.00 (0.98 – 1.02)
Timepoint (FU > BL)	0.90 (0.78 – 1.03)	0.90 (0.78 – 1.04)	0.90 (0.79 – 1.03)
Intervention (Fiber > Placebo)	1.02 (0.89 – 1.16)	1.02 (0.89 – 1.17)	1.02 (0.90 – 1.17)
Wanting * Category (F > NF)	0.99 (0.93 – 1.05)		
Timepoint * Intervention	1.13 (0.94 – 1.37)	1.13 (0.92 – 1.38)	1.12 (0.93 – 1.36)
Random Effects			
σ^2	3.29	3.29	3.29
T ₀₀	0.23 Image	0.23 Image	0.22 Image
	0.09 Subject	0.09 Subject	0.13 Subject
T ₁₁	0.00 Subject.Wanting	0.00 Subject.Wanting	0.01 Subject.Wanting
	0.07 Subject.CategoryF	0.07 Subject.CategoryF	0.08 Subject.CategoryF
	0.00 Subject.Wanting:CategoryF	0.00 Subject.Wanting:CategoryF	0.00 Subject.Wanting:CategoryF
P ₀₁			
P ₀₁			
ICC	0.12	0.11	0.11
N	56 Subject	56 Subject	56 Subject
	240 Image	240 Image	240 Image
Observations	10658	10658	10658
Marginal R ² / Conditional R ²	0.023 / 0.078	0.023 / 0.078	0.017 / 0.077

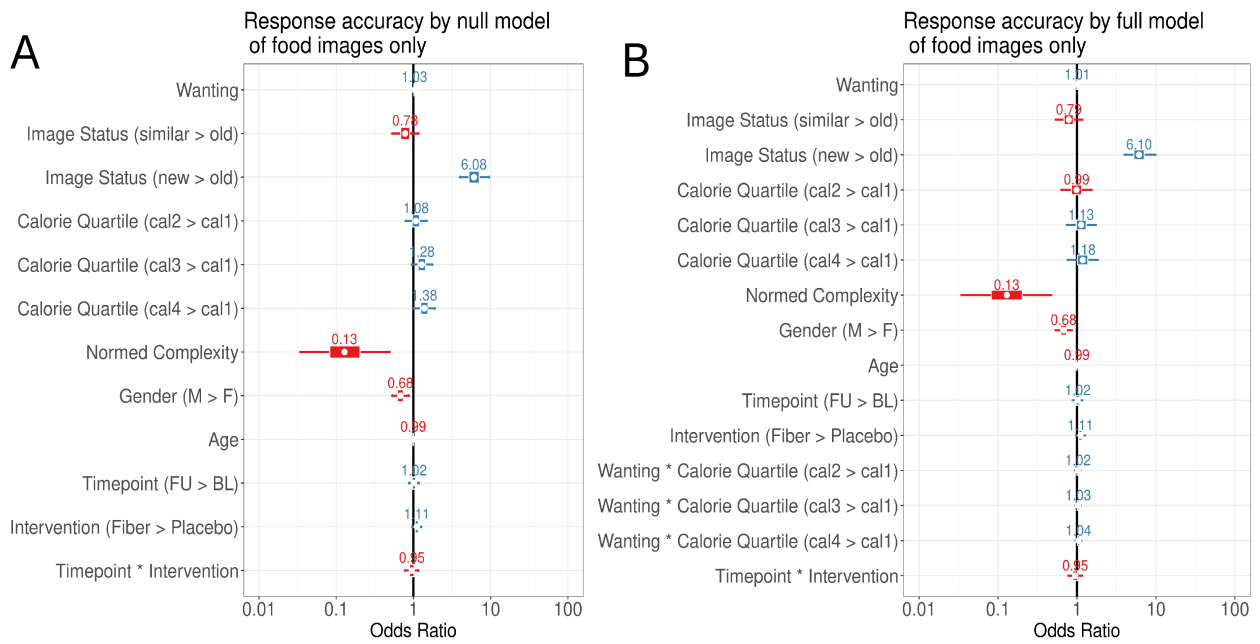


Figure 13-1: Odds ratios for the effect of calorie content of food images on response accuracy: A) null model 1 (Table 2, Eq. 39), B) full model 1 (Table 2, Eq. 38). Values indicate the positive (blue) or negative (red) median odds ratio (exponentiated regression coefficients) and whiskers represent the 50% (thick, inner) and 95% (thin, outer) CI. **A) Calorie content did evidently predict food memory accuracy (cal4 > cal1).** B) However, the wanting enhancement of memory accuracy was not different between calorie quartiles. In addition, new images were evidently better recognized and the effect of normed complexity and Gender ($M < F$) seemed to be evident as their 95% CI did not include Zero.

Table 13-1: Full and null BLRMs for the effect of calorie content on food memory accuracy.

<i>Predictors for response accuracy</i>	full model	null model 1	null model 2
	<i>Odds Ratios</i>	<i>Odds Ratios</i>	<i>Odds Ratios</i>
Intercept	11.22 (5.44 – 22.88)	10.30 (5.30 – 19.79)	11.80 (6.08 – 23.29)
Wanting	1.01 (0.95 – 1.07)	1.03 (1.00 – 1.07)	1.03 (1.00 – 1.07)
Image Status (similar > old)	0.79 (0.54 – 1.16)	0.78 (0.53 – 1.16)	0.79 (0.54 – 1.16)
Image Status (new > old)	6.10 (3.98 – 9.86)	6.08 (4.00 – 9.56)	6.08 (3.99 – 9.67)
Calorie Quartile (cal2 > cal1)	0.99 (0.63 – 1.53)	1.08 (0.79 – 1.48)	
Calorie Quartile (cal3 > cal1)	1.13 (0.74 – 1.73)	1.28 (0.95 – 1.77)	
Calorie Quartile (cal4 > cal1)	1.18 (0.76 – 1.84)	1.38 (1.01 – 1.89)	
Normed Complexity	0.13 (0.03 – 0.47)	0.13 (0.03 – 0.49)	0.14 (0.04 – 0.54)
Gender (M > F)	0.68 (0.53 – 0.87)	0.68 (0.53 – 0.87)	0.68 (0.53 – 0.87)
Age	0.99 (0.97 – 1.01)	0.99 (0.98 – 1.01)	0.99 (0.98 – 1.01)
Timepoint (FU > BL)	1.02 (0.88 – 1.17)	1.02 (0.88 – 1.17)	1.02 (0.88 – 1.17)
Intervention (Fiber > Placebo)	1.11 (0.97 – 1.27)	1.11 (0.96 – 1.26)	1.11 (0.96 – 1.27)
Wanting * Calorie Quartile (cal2 > cal1)	1.02 (0.95 – 1.10)		
Wanting * Calorie Quartile (cal3 > cal1)	1.03 (0.96 – 1.11)		
Wanting * Calorie Quartile (cal4 > cal1)	1.04 (0.96 – 1.14)		
Timepoint * Intervention	0.95 (0.78 – 1.16)	0.95 (0.78 – 1.16)	0.95 (0.78 – 1.15)
Random Effects			
σ^2	3.29	3.29	3.29
T_{00}	0.70 Image	0.70 Image	0.71 Image
	0.29 Subject	0.28 Subject	0.29 Subject
T_{11}	0.00 Subject.Wanting	0.00 Subject.Wanting	0.00 Subject.Wanting
	1.23 Subject.Statussimilar	1.21 Subject.Statussimilar	1.22 Subject.Statussimilar
	1.13 Subject.Statusnew	1.11 Subject.Statusnew	1.13 Subject.Statusnew
	0.11 Subject.Typecal2	0.11 Subject.Typecal2	0.11 Subject.Typecal2
	0.09 Subject.Typecal3	0.09 Subject.Typecal3	0.09 Subject.Typecal3
	0.03 Subject.Typecal4	0.03 Subject.Typecal4	0.03 Subject.Typecal4
ρ_{01}			
ρ_{01}			
ICC	0.30	0.30	0.30
N	56 Subject	56 Subject	56 Subject
	320 Image	320 Image	320 Image
Observations	14213	14213	14213
Marginal R ² / Conditional R ²	0.043 / 0.206	0.043 / 0.205	0.039 / 0.205

Table 15-1: Full and null BLRMs for the effect of neuroticism on d' .

	full model	null model 1	null model 2	null model 3
<i>Predictors for d'</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	2.16 (1.18 – 3.00)	2.07 (1.44 – 2.66)	2.27 (1.81 – 2.73)	1.85 (1.42 – 2.26)
Neuroticism	-0.22 (-0.91 – 0.51)	-0.14 (-0.42 – 0.15)	-0.26 (-0.42 – -0.10)	
Gender (M > F)	-0.05 (-0.49 – 0.43)	-0.06 (-0.48 – 0.37)	-0.26 (-0.44 – -0.08)	-0.24 (-0.44 – -0.05)
Age	-0.01 (-0.04 – 0.02)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.00)	-0.01 (-0.02 – 0.01)
Neuroticism * Gender (M > F)	-0.20 (-0.58 – 0.18)	-0.18 (-0.52 – 0.16)		
Neuroticism * Age	0.00 (-0.02 – 0.03)			
Random Effects				
σ^2	0.08	0.08	0.08	0.08
T_{00}	0.05 Subject	0.04 Subject	0.03 Subject	0.11 Subject
T_{11}	0.07 Subject.neuroticism	0.06 Subject.neuroticism	0.05 Subject.neuroticism	0.11 Subject.neuroticism
ρ_{01}				
ICC	0.57	0.57	0.57	0.59
N	56 Subject	56 Subject	56 Subject	56 Subject
Observations	180	180	180	180
Marginal R ² / Conditional R ²	0.238 / 0.641	0.232 / 0.641	0.197 / 0.640	0.092 / 0.635

Table 15-2: Full and null BLRMs for the effect of neuroticism on LDI.

	full model	null model 1	null model 2	null model 3
<i>Predictors for LDI</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	1.72 (0.72 – 2.67)	1.77 (1.12 – 2.38)	1.91 (1.43 – 2.39)	1.58 (1.14 – 2.00)
Neuroticism	-0.08 (-0.83 – 0.67)	-0.13 (-0.42 – 0.17)	-0.21 (-0.38 – -0.04)	
Gender (M > F)	-0.16 (-0.59 – 0.34)	-0.15 (-0.59 – 0.33)	-0.29 (-0.47 – -0.11)	-0.27 (-0.47 – -0.08)
Age	-0.01 (-0.04 – 0.02)	-0.01 (-0.02 – 0.01)	-0.01 (-0.02 – 0.00)	-0.01 (-0.02 – 0.01)
Neuroticism * Gender (M > F)	-0.12 (-0.53 – 0.27)	-0.12 (-0.50 – 0.23)		
Neuroticism * Age	-0.00 (-0.03 – 0.02)			
Random Effects				
σ^2	0.09	0.09	0.09	0.09
T_{00}	0.05 Subject	0.05 Subject	0.04 Subject	0.09 Subject
T_{11}	0.07 Subject.neuroticism	0.07 Subject.neuroticism	0.06 Subject.neuroticism	0.10 Subject.neuroticism
ρ_{01}				
ICC	0.53	0.52	0.52	0.48
N	56 Subject	56 Subject	56 Subject	56 Subject
Observations	180	180	180	180
Marginal R ² / Conditional R ²	0.205 / 0.592	0.199 / 0.591	0.176 / 0.590	0.106 / 0.586

Table 16-1: Full and null BLRMs for the effect of age and gender on microstructural coherence of the UF.

	full model	null model 1	null model 2	null model 3	null model 4
<i>Predictors for nQA(UF)</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Intercept	0.27 (0.23 – 0.30)	0.27 (0.23 – 0.30)	0.29 (0.26 – 0.31)	0.27 (0.26 – 0.28)	0.27 (0.27 – 0.28)
Gender (M>F)	0.04 (-0.01 – 0.09)	0.04 (-0.00 – 0.09)	0.01 (-0.00 – 0.02)	0.01 (-0.00 – 0.02)	
Age	0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)		
Timepoint (FU > BL)	-0.00 (-0.01 – 0.00)	0.00 (-0.00 – 0.01)	-0.00 (-0.01 – 0.00)	0.00 (-0.00 – 0.01)	0.00 (-0.00 – 0.01)
Intervention (Fiber > Placebo)	-0.00 (-0.01 – 0.00)	0.00 (-0.00 – 0.00)	-0.00 (-0.01 – 0.00)	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)
Gender (M>F) * Age	-0.00 (-0.00 – 0.00)	-0.00 (-0.00 – 0.00)			
Timepoint * Intervention	0.01 (-0.00 – 0.01)		0.01 (-0.00 – 0.01)		
Random Effects					
σ^2	0.00	0.00	0.00	0.00	0.00
T ₀₀	0.00 Subject	0.00 Subject	0.00 Subject	0.00 Subject	0.00 Subject
T ₁₁	0.00 Subject.Timepoint_shortFU	0.00 Subject.Timepoint_shortFU	0.00 Subject.Timepoint_shortFU	0.00 Subject.Timepoint_shortFU	0.00 Subject.Timepoint_shortFU
	0.00 Subject.InterventionB	0.00 Subject.InterventionB	0.00 Subject.InterventionB	0.00 Subject.InterventionB	0.00 Subject.InterventionB
P ₀₁					
P ₀₁					
ICC	0.69	0.68	0.69	0.70	0.70
N	55 Subject	55 Subject	55 Subject	55 Subject	55 Subject
Observations	176	176	176	176	176
Marginal R ² / Conditional R ²	0.112 / 0.682	0.108 / 0.675	0.084 / 0.679	0.027 / 0.677	0.004 / 0.673

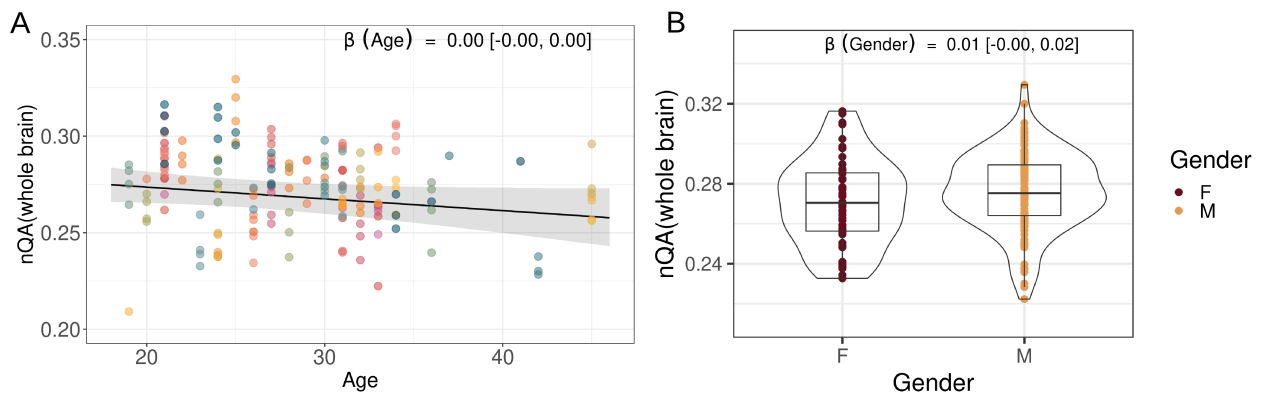


Figure 16-1: Microstructural coherence of whole brain depending on age and gender. Actual and predicted microstructural coherence of the whole brain, reflected in its nQA value, A) by age and B) by gender. Points show actual data of the colour-coded subjects. A) Prediction line with 95%-CI is based on null model 2 (Table 2, Eq. 47). B) Violin and boxplots present the distribution of the nQA values over both genders. **Neither age nor gender predicted the microstructural coherence of the UF.**