618 **Supplementary Material**

Supplementary Material 1

Table S1

List of IAPS (Lang, Bradley, and Cuthbert, 2008) and EmoPicS (Wessa et al., 2010) used in the ER paradigm.

	Neutral	Negative 1	Negative 2	Negative 3	Negative 4	Negative 5
	083†	225†	210†	208†	227†	223†
	107†	230†	218†	219†	252†	238†
	124†	255†	222†	226†	1051*	245†
	140†	327†	228†	253†	2800*	2981*
	143†	1111*	246†	254†	3061*	3016*
	7000*	3017*	251†	326†	3230*	3101*
	7002*	3022*	2703*	1301*	6561*	3181*
	7004*	3180*	3051*	3350*	6838*	3215*
	7006*	3280*	3160*	6242*	9120*	3220*
	7009*	6190*	3185*	6410*	9181*	3225*
	7021*	6244*	3301*	6555*	9185*	6020*
	7025*	6836*	6562*	6825*	9230*	6571*
	7041*	9180*	9031*	6940*	9254*	6831*
	7100*	9182*	9040*	8230*	9295*	8231*
	7150*	9253*	9042*	9041*	9332*	9373*
	7185*	9300*	9043*	9140*	9411*	9400*
	7211*	9326*	9145*	9340*	9420*	9402*
	7224*	9424*	9160*	9409*	9421*	9403*
	7233*	9425*	9184*	9570*	9599*	9405*
	7235*	9920*	9904*	9800*	9905*	9423*
Valence	4.86 ± 0.49	2.84 ± 0.57	2.64 ± 0.46	2.82 ± 0.62	2.65 ± 0.75	2.74 ± 0.70
Arousal	3.01 ± 0.61	5.62 ± 0.34	5.58 ± 0.38	5.60 ± 0.39	5.61 ± 0.41	5.63 ± 0.37

Note. * Pictures taken from the IAPS (Lang, Bradley, and Cuthbert, 2008); † Pictures taken from the EmoPicS (Wessa et al., 2010).

Detailed information on psychometric measures

WHO-5. General psychological well-being is assessed using the WHO-5 scale[45,46]. 5 Items such as "Over the past 2 weeks I have felt calm and relaxed." are rated on a 6-point Likert scale raning from 0 (at no time) to 5 (all of the time). The german version of the scale showed a high internal consistency (Cronbach's $\alpha = .92$)[46].

Connor-Davidson Resilience Scale. Resilience is assessed using the Connor-Davidson Resilience Scale (CD-RISC)[47–49]. 10 items such as "I am able to adapt to change." are rated on a scale from 0 (not true at all) to 4 (true nearly all the time). The 10-item version showed a high internal consistency (Cronbach's $\alpha = .84$) and a satisfactory retest-reliability of $r_{tt} = .81$ across 6 month[48].

Emotion Regulation Questionnaire. Habitual use of reappraisal and suppression is measured using the 10-item Emotion Regulation Questionnaire (ERQ)[9,50]. The scale has items such as "I keep my emotions to myself" (ERQ-suppression - 4 items) and "When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm" (ERQ-reappraisal - 6 items), which are answered on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), and has acceptable to high internal consistency (Cronbach's $\alpha > .75$)[69].

FlexER Scale. Flexible use of ER strategies is assessed using the FlexER Scale[44] with items such as "If I want to feel less negative emotions, I have several strategies to achieve this.", which are answered on a 4-point scale ranging from "strongly agree" to "strongly disagree". Psychometric properties are currently under investigation.

Implicit Theories Questionnaire. Implicit theories of willpower in emotional control are assessed using the Implicit Theories Questionnaire of[51]. 4 items such as "Having to control a strong emotion makes you exhausted and you are less able to manage your feelings right afterwards." are rated on a 6-point scale ranging from 1 (fully agree) to 6 (do not agree at all). The questionnaire showed an internal consistency of Cronbach's $\alpha = .87$[51].

Need for Cognition Scale. Need for Cognition (NFC) is assessed with the 16-item short version of the German NFC scale[52]. Responses to each item (e.g., "Thinking is not my idea of fun", recoded) are recorded on a 7-point Likert scale ranging from -3 (completely disagree) to +3 (completely agree) and are summed to the total NFC score. The scale shows comparably high internal consistency (Cronbach's $\alpha > .80$)[52,70] and a retest reliability of $r_{tt} = .83$ across 8 to 18 weeks[71].

Self-Regulation Scale. As one measure of self-control, the Self-Regulation Scale (SRS)[54] is used. The scale has 10 items (e.g., "It is difficult for me to suppress thoughts that interfere with what I need to do.", recoded) on a 4-point scale ranging from 1 (not at all true) to 4 (exactly true). It has high internal consistency [Cronbach's $\alpha > .80$;[54]].

Brief Self-Control Scale. As a second measure of self-control, the Brief Self-Control Scale (BSCS)[55,56] is used. It comprises 13 items (e.g., "I am good at resisting temptations") with a 5-point rating scale ranging from 1 (not at all like me) to 5 (very much like me). The scale shows acceptable internal consistency (Cronbach's $\alpha = .81$)[56] .

Barratt Impulsiveness Scale. As a third measure of self-control, the Barratt Impulsiveness Scale (BIS-11)[57,58] is used. Responses to each item (e.g., "I am self-controlled.", recoded) are assessed on a 4-point scale ranging from 1 (never/rarely) to 4 (almost always/always). An internal consistency of Cronbach's $\alpha = .74$ and a retest reliability of $r_{tt} = .56$ for General Impulsiveness and $r_{tt} = .66$ for Total Score across 6 month were reported[58].

Attentional Control Scale. Attentional control is measured using the Attentional Control Scale (ACS)[59] with items such as "My concentration is good even if there is music in the room around me". The 20 items are rated on a 4-point scale ranging from 1 (almost never) to 4 (always). An internal consistency of Cronbach's $\alpha = .88$ was reported[59].

Pilot study: Subjective arousal in the conditions "Active viewing - neutral" and "Active viewing - negative"

ANOVA:

Effect	df	MSE	F	ges	p.value
block	1, 15	3895.91	34.32 ***	.475	<.001

$BF10$ = 1,244.99

Paired contrasts:

Table S.2
Paired contrasts for the rmANOVA comparing subjective arousal of negative and neutral pictures in the condition "active viewing".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	95%CI
$View_{neutral} - View_{negative}$	-129.28	22.07	15.00	-5.86	0.00	794.78	0.70	[0.43, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

Figure:

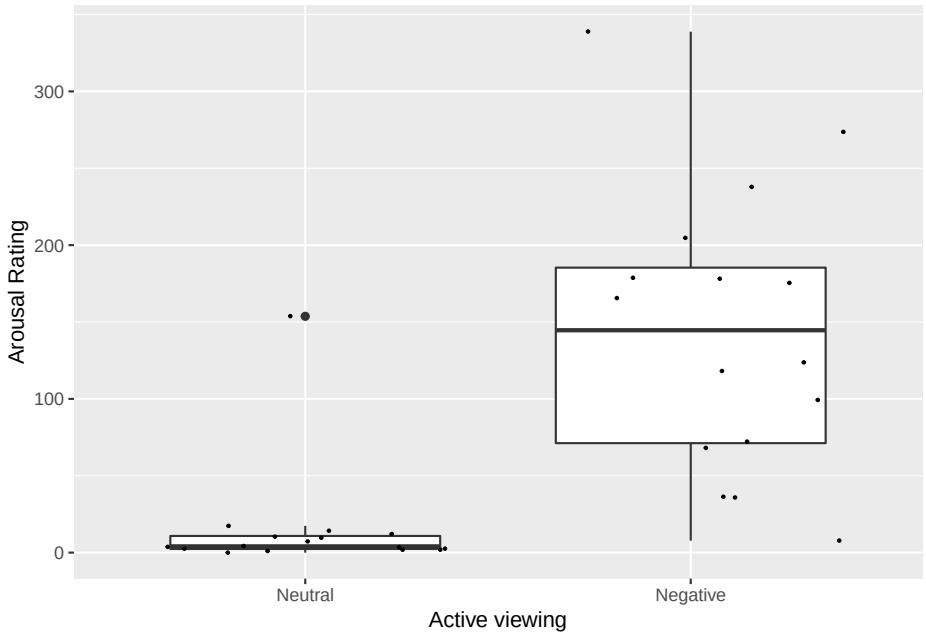

Figure S.1. Subjective arousal ratings for the conditions "Active viewing - neutral" and "Active viewing - negative" visualized as boxplots. Each dot represents the effort rating of a single subject. Bold dots represent outliers.

Pilot study: Subjective arousal in the conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression"

ANOVA:

Effect	df	MSE	F	ges	p.value
block	2.79, 41.89	2238.27	1.17	.011	.332

$BF10 = 0.11$

Paired contrasts:

Table S.3
Paired contrasts for the rmANOVA comparing subjective arousal of conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	$95\%CI$
$View_{negative} - Distraction$	-0.74	16.14	45.00	-0.05	1.00	0.26	4.68e-05	[0.00, 1.00]
$View_{negative} - Distancing$	-5.35	16.14	45.00	-0.33	1.00	0.27	2.43e-03	[0.00, 1.00]
$View_{negative} - Suppression$	-26.23	16.14	45.00	-1.63	0.67	1.25	0.06	[0.00, 1.00]
$Distraction - Distancing$	-4.61	16.14	45.00	-0.29	1.00	0.26	1.81e-03	[0.00, 1.00]
$Distraction - Suppression$	-25.49	16.14	45.00	-1.58	0.73	0.77	0.05	[0.00, 1.00]
$Distancing - Suppression$	-20.88	16.14	45.00	-1.29	1.00	0.52	0.04	[0.00, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

683 Figure:

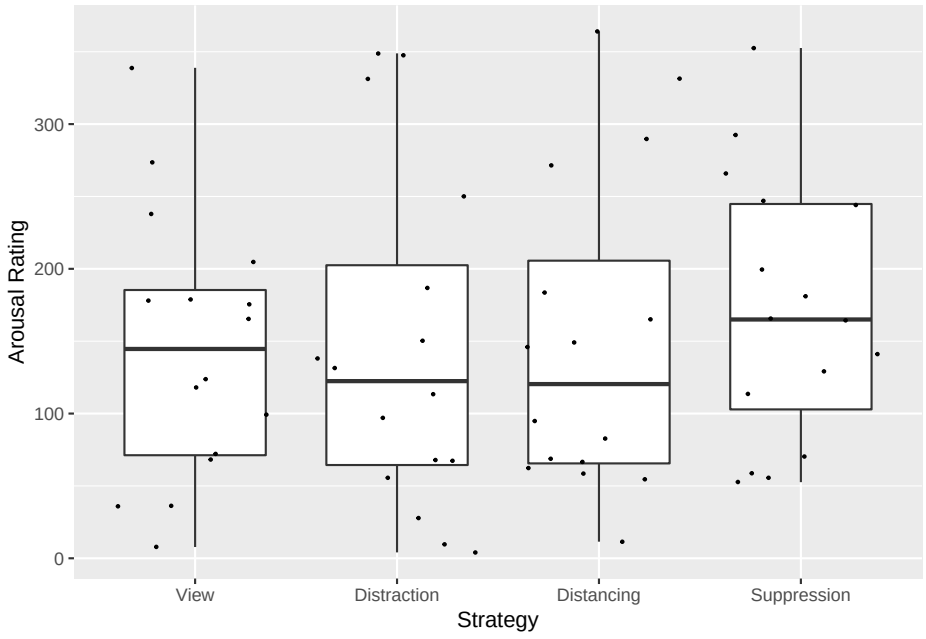

Figure S.2. Subjective arousal ratings for the conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression" visualized as boxplots. Each dot represents the effort rating of a single subject. Bold dots represent outliers.

Pilot study: Physiological responding (*Corrugator* and *Levator* activity) in the conditions "Active viewing - neutral" and "Active viewing - negative"

Corrugator: ANOVA:

Effect	df	MSE	F	ges	p.value
block	1, 15	1.01	9.70 **	.237	.007

$BF10$ = 6,690,401.91

Paired contrasts:

Table S.4
Paired contrasts for the rmANOVA comparing physiological responding (Corrugator activity) of negative and neutral pictures in the condition "active viewing".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	95%CI
$View_{neutral} - View_{negative}$	-1.11	0.36	15.00	-3.11	0.01	5,019,313.20	0.39	[0.09, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

Levator: ANOVA:

Effect	df	MSE	F	ges	p.value
block	1, 15	0.17	7.72 *	.162	.014

$BF10$ = 48.44

Paired contrasts:

Table S.5
Paired contrasts for the rmANOVA comparing physiological responding (Levator activity) of negative and neutral pictures in the condition "active viewing".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	95%CI
$View_{neutral} - View_{negative}$	-0.40	0.14	15.00	-2.78	0.01	41.02	0.34	[0.05, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

694 Figures:

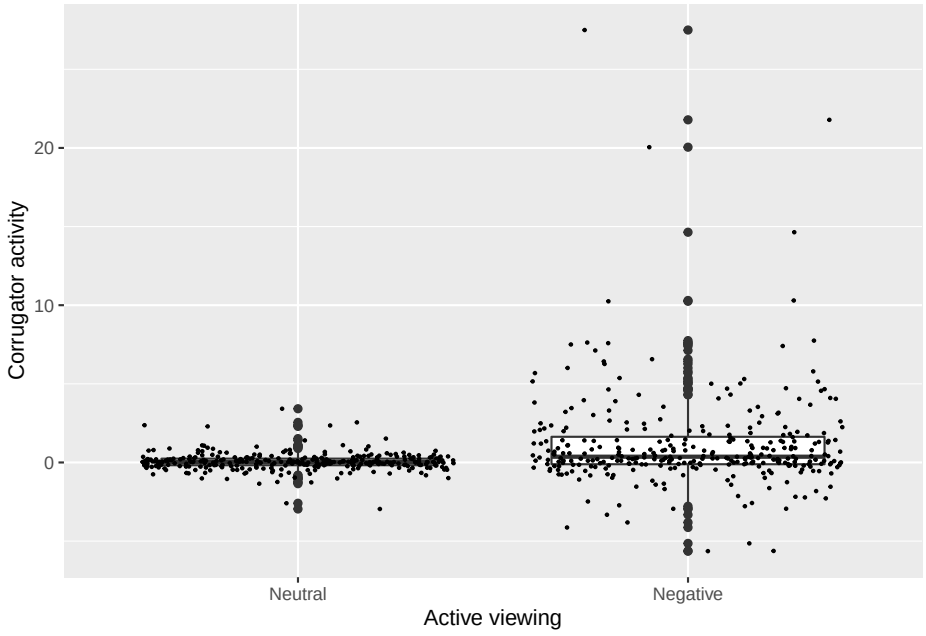

Figure S.3. Corrugator activity for the conditions "Active viewing - neutral" and "Active viewing - negative" visualized as boxplots. Each dot represents the corrugator activity of a single trial. Bold dots represent outliers.

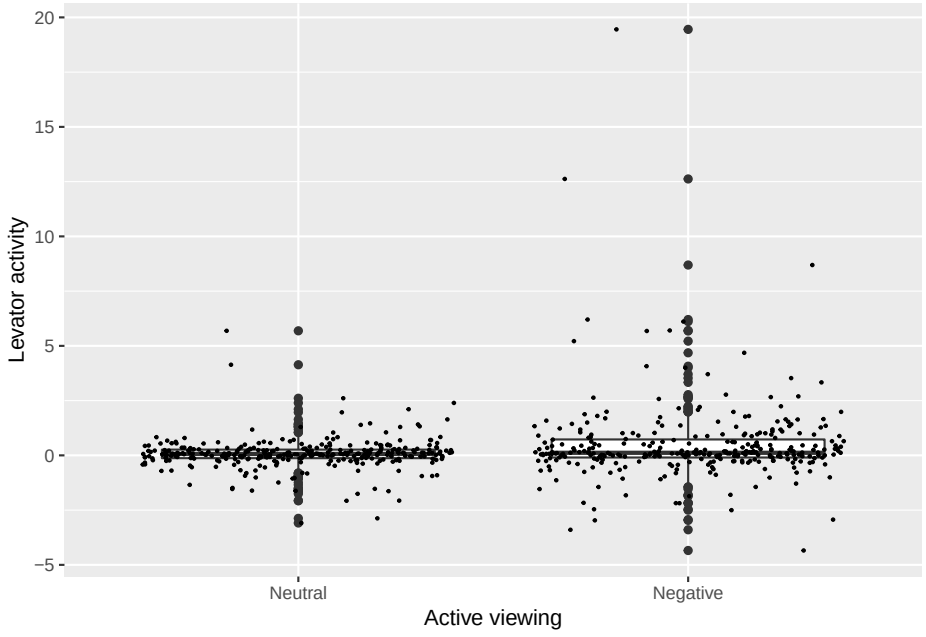

Figure S.4. Levator activity for the conditions "Active viewing - neutral" and "Active viewing - negative" visualized as boxplots. Each dot represents the levator activity of a single trial. Bold dots represent outliers.

Pilot study: Physiological responding (*Corrugator* and *Levator* activity) in the conditions"Active viewing - negative", "Distraction", "Distancing", and "Suppression"

Corrugator: ANOVA:

Effect	df	MSE	F	ges	p.value
block	1.53, 22.98	1.16	5.71 *	.189	.015

$BF10$ = 5,257,689.54

Paired contrasts:

Table S.6
Paired contrasts for the rmANOVA comparing physiological responding (Corrugator activity) of conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	95%CI
$View_{negative} - Distraction$	0.88	0.27	45.00	3.22	0.01	4,962.89	0.19	[0.05, 1.00]
$View_{negative} - Distancing$	0.95	0.27	45.00	3.50	0.01	616.63	0.21	[0.06, 1.00]
$View_{negative} - Suppression$	0.92	0.27	45.00	3.40	0.01	11,678.82	0.20	[0.06, 1.00]
$Distraction - Distancing$	0.08	0.27	45.00	0.28	1.00	0.07	1.78e-03	[0.00, 1.00]
$Distraction - Suppression$	0.05	0.27	45.00	0.18	1.00	0.08	7.22e-04	[0.00, 1.00]
$Distancing - Suppression$	-0.03	0.27	45.00	-0.10	1.00	0.06	2.36e-04	[0.00, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

Levator: ANOVA:

Effect	df	MSE	F	ges	p.value
block	2.07, 31.00	0.20	8.27 **	.225	.001

$BF10$ = 672,341.29

Paired contrasts:

Table S.7
Paired contrasts for the rmANOVA comparing physiological respodning (Levator activity) of conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	$95\%CI$
$View_{negative} - Distraction$	0.42	0.13	45.00	3.24	0.01	58.02	0.19	[0.05, 1.00]
$View_{negative} - Distancing$	0.45	0.13	45.00	3.46	0.01	93.49	0.21	[0.06, 1.00]
$View_{negative} - Suppression$	0.62	0.13	45.00	4.79	0.00	6,253.91	0.34	[0.16, 1.00]
$Distraction - Distancing$	0.03	0.13	45.00	0.22	1.00	0.07	1.06e-03	[0.00, 1.00]
$Distraction - Suppression$	0.20	0.13	45.00	1.54	0.78	1.52	0.05	[0.00, 1.00]
$Distancing - Suppression$	0.17	0.13	45.00	1.32	1.00	0.52	0.04	[0.00, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

706 Figures:

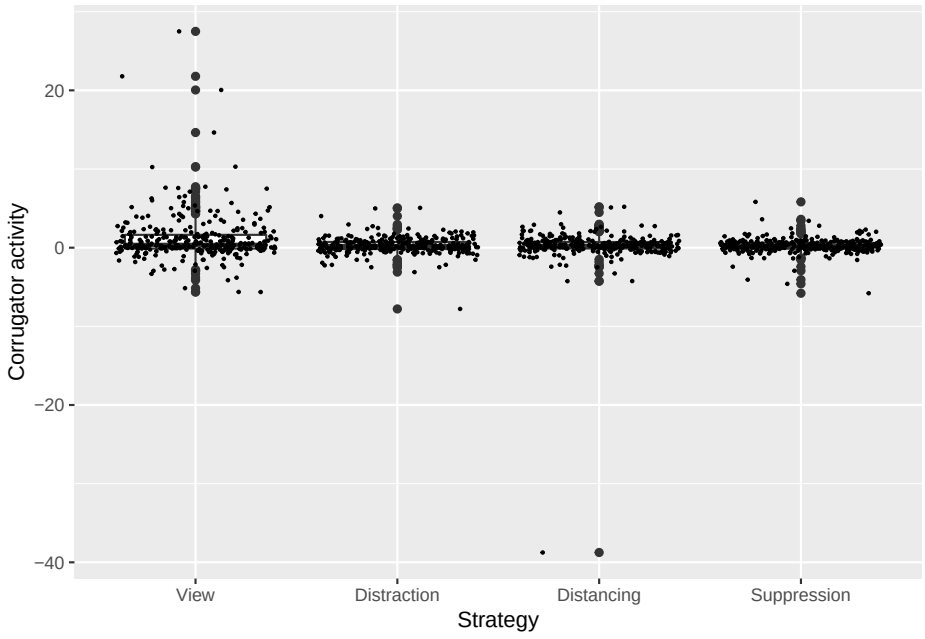

Figure S.5. Corrugator activity for the conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression" visualized as boxplots. Each dot represents the corrugator activity of a single trial. Bold dots represent outliers.

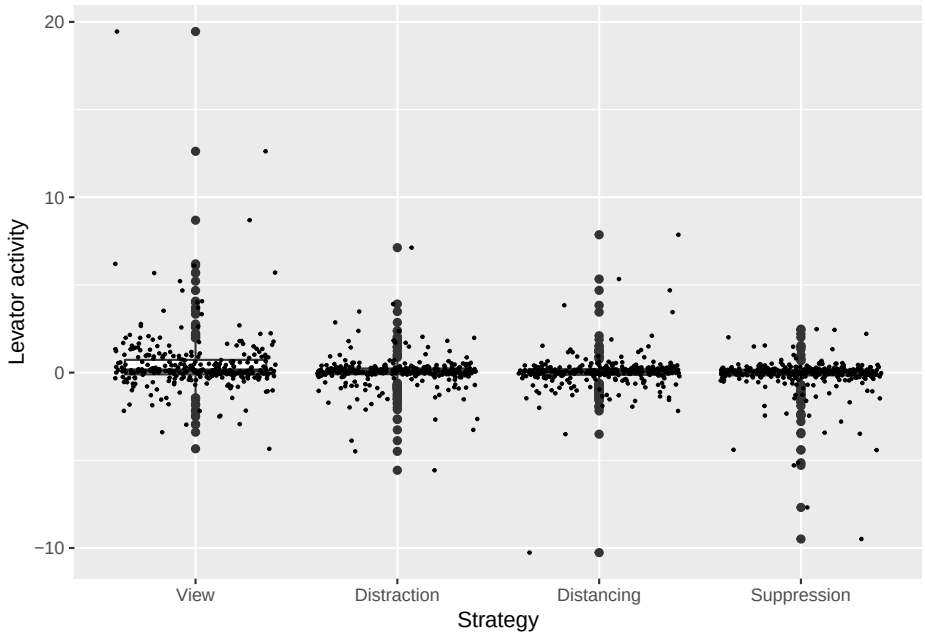

Figure S.6. Levator activity for the conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression" visualized as boxplots. Each dot represents the levator activity of a single trial. Bold dots represent outliers.

Pilot study: Subjective effort in the conditions “Active viewing - negative”, “Distraction”, “Distancing”, and “Suppression”

ANOVA:

Effect	df	MSE	F	ges	p.value
block	2.38, 35.66	4388.19	11.13 ***	.185	<.001

$BF10 = 7.40$

Paired contrasts:

Table S.8
Paired contrasts for the rmANOVA comparing subjective effort of conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression".

Contrast	Estimate	SE	df	t	p	$BF10$	η_p^2	$95\%CI$
$View_{negative} - Distancing$	-110.72	20.85	45.00	-5.31	0.00	59.77	0.39	[0.20, 1.00]
$View_{negative} - Distraction$	-89.72	20.85	45.00	-4.30	0.00	20.49	0.29	[0.12, 1.00]
$View_{negative} - Suppression$	-88.15	20.85	45.00	-4.23	0.00	33.13	0.28	[0.11, 1.00]
$Distraction - Distancing$	21.00	20.85	45.00	1.01	1.00	0.50	0.02	[0.00, 1.00]
$Distraction - Suppression$	22.57	20.85	45.00	1.08	1.00	0.57	0.03	[0.00, 1.00]
$Distancing - Suppression$	1.57	20.85	45.00	0.08	1.00	0.26	1.27e-04	[0.00, 1.00]

Note. SE = standard error, df = degrees of freedom, t = t-statistic, p = p-value, CI = confidence interval.

713 Figure:

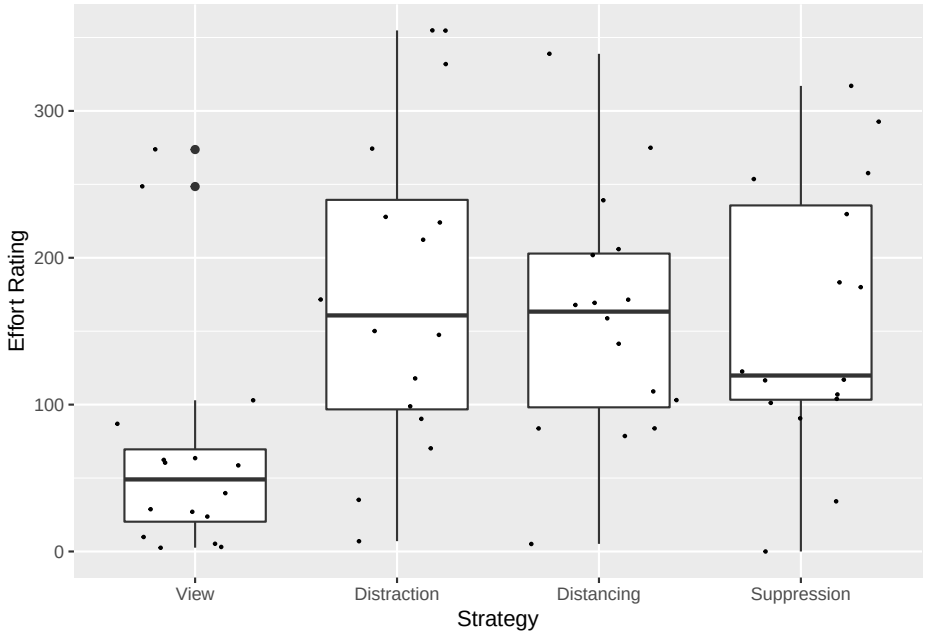

Figure S.7. Subjective effort ratings for the conditions "Active viewing - negative", "Distraction", "Distancing", and "Suppression" visualized as boxplots. Each dot represents the effort rating of a single subject. Bold dots represent outliers.